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The book covers the major topical issues without resorting to technical jargon. Moreoever, it relates some of Lonergan's novel ideas about the economy to current mainstream concepts... Not least is his plea to restore the moral dimension and the social values that remain shrouded in current economic thought focused as it is on ″efficiency among alternatives″.

– Abraham Rotstein, Professor Emeritus, Department of Economics and Political Science, University of Toronto

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– Philip McShane, Professor Emeritus
Mount St. Vincent University

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DECODING THE ECONOMY

de Neeve

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Understanding Change with Bernard Lonergan

Eileen de Neeve

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EILEEN DE NEEVE

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For my family and community with thanks and hope.

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The world process, the physical, chemical, vegetal, animal, and human potentialities of universal nature, are ever stimulated, guided, aided by human effort to the goal of human survival and enjoyment, of human achievement, waste, and destruction . . . Men strive in many fields: they organize human society by politics and war; they orientate their lives by philosophy and religion; they augment knowledge by science and perpetuate intuitions through art; they cool passion and regulate equity by law; they protect and hasten health by medicine; and generation succeeds generation in this heritage of culture through the testament of education . . . None of it is, strictly, economic activity. Yet conditioning all culture and inextricably confused with it, there is the economic factor.

The old political economists were creative thinkers. They took into their hands the vast forces of nascent industrialism. They directed and moulded the nineteenth-century development of commercial, industrial, financial, juridical, and even political structure . . . It is, we believe, a scientific generalization of the old political economy and of modern economics that will yield the new political economy which we need . . .

Plainly the way out is through the more general field . . . When, then, we ask for a fresh generalization, we are not moving a hair's breadth outside the orbit of science. On the other hand, we are asking for an instrument that democracy must have, for it is the broad generalization, the significant correlation that effectively organizes free men without breaking down their freedom.

– BERNARD LONERGAN

PREFACE

This book is the outcome of years of designing and leading social science courses for adults in the Liberal Arts program at the Thomas More Institute in Montreal. Adults who are interested in social issues and must make policy choices as citizens, often find reading about the economy too technical or too controversial. The educational challenge in a democratic environment is to make the relations among economic variables more accessible to nonspecialists, and to find ways through the controversies to a reasoned position or, at least, to the possibility of dialogue.

A country's economic policies depend, at least in part, on its politics. Marx, for example, proposed policies that encouraged revolution in response to what he understood as structural economic inequities. On the other hand during the Great Depression, Hayek fearing inflation recommended limiting credit creation, and allowing the economy to find its own equilibrium. After World War II, it was Keynes's policies of government action to end the depression and stabilize the economy that prevailed. What actions in the economy are indicated by government's social role? Do governments act only when markets fail? And can governments also fail in their financial management?

This book is a response to these questions and to the interest adults have in the political and social economy as it affects them, their country, and the world. To decode the economy we will focus on people doing economic things such as finding new ways to produce, building for the future with bricks and know-how, working for wages and profits, cooperating with other people locally and globally, caring for others, and having what they need and what they value most. By decoding the economy for ourselves, perhaps we can learn ways to make economic and political choices that will benefit everyone. Many of us enjoy the sweep of history and want to understand what is happening in our country and the world. Certainly, the economy is a crucial part of history and of our current lives. And history and the history of thought are important—as the bases on which we can build a future.

The science of economics itself is also part of history, but of the history of thought. Thus this decoding explores how different philosophers and economists, in a dialogue that spanned centuries, slowly built up and pruned their theories to understand how markets, governments, finance, and culture influence the economy. Economics is a human science that develops with the insights of its scientists, just as the economy itself responds to the innovation and growth that producers initiate. And economists continue to work toward a better understanding of economic innovation and growth itself, as well as of the related issues of money and credit flows and sufficient employment opportunities.

My own perspective as an economist has been informed by Bernard Lonergan's general theory of the cycle of innovative growth. This book draws particular attention to his thought by introducing each chapter with an epigraph taken from his economic writings. Some epigraphs are philosophical, indicating that there are economic questions that extend beyond empirical analysis and even the narrowly defined theory that explains strictly economic variables. Nevertheless, the economic good has its own criteria regarding producers' efficiency, the maintenance of trust in contracts by producers and consumers, and a sufficient level of cooperation in the economy.

Lonergan's explanation builds on the work of earlier economists. And economists have recently framed some of his ideas—the production phases and lags—in mathematical models of innovation and growth. For Lonergan, income distribution is crucial in growth both to provide sufficient savings for the investment expansion phase and to ensure the production, jobs, and income required so that the higher standard of living, made possible by new investment, may be broadly shared.

This decoding of the economy also includes Lonergan's ideas on the *good of order*, a notion that explains the networks of cooperative activities of citizens, producers, and consumers that function dynamically in an economy and a state. The actual good of order that exists can change as a result of progress or decline. If decline is avoided or remedied, new ideas can be put in place by the generous and intelligent actions of individuals and groups—new ideas that become accepted by people in general. Although progress is achieved slowly because it depends on new ideas being put in place and accepted, breakdown is often abrupt and accompanied by dissension and conflict.

This book draws on illustrations from economic history and contemporary events. These examples suggest that the central preoccupation in every economy has been production. People's livelihood and consumption depend on production. And getting production right has led to more consumption and a higher standard of living for many people. In fact, technical change and its transformation into production mark the whole of economic history. Moreover, the pace and systematic transformation of new ideas into production has only accelerated during recent centuries.

The most striking result of this fact has been an increase in productivity. Today, we produce more with fewer people and materials. Finding new ways to work and earn income has become part of the process of development and growth. Some people have found work in the extension of production to serve growing populations. Some have turned to other kinds of work: producing public goods (roads, public education, research or government services) that are subsidized by citizens of a country through their governments. Some people have found work in private nonprofit production of social goods, supported by government or private funding. But often too many working-age, employable people are not able to participate in production. This remains an issue in market economies and a subject for economists' research.

This decoding of the economy also emphasizes the place of finance as an economic variable, whether it occurs as cash, credit, or assets, or stems from local or foreign sources. Its role is crucial in the phases of economic innovation and growth that are so much a part of our history. Much of economic thought has focused on changes in real variables—the goods and services themselves. Finance has often been regarded as neutral, or economists have urged governments to maintain stable money flows. But in our dominantly market economy, which has advantages of freedom and choice, finance is by no means mainly controlled by governments. Large, private international financial movements do exist, and can be volatile and disruptive. Finance therefore remains an important area for economic research and policy proposals, even though it is an area that involves government as well as international understanding and agreement.

The science of economics, which is less than 300 years old, is sometimes accused of trying to imitate the physical sciences. Unlike the physical sciences, the data of the human sciences include the results of people's behaviours. In the human sciences, like economics, scientists not only record the objective results in the data but also criticize them to improve the results if possible.

You are invited to share in the effort of decoding the economy with people in their economic activities, and with economists in their theory and practice, as they struggle forward to understand and manage the changing world economy. But understanding some of the science of how economic variables are related is necessary if we are to adapt our economic behaviour to get what we all need from our production and market systems. Certainly, economists can give advice to governments, but we must know enough about the economy to give our informed consent to policies that are proposed.

Some of the recent TMI courses that shaped my ideas on the economic education of nonspecialist adults are listed in Appendix Two. Roger Fournier, David Farrell, Sandy Highet, Stan Machnik, Joseph Masciulli, Brian McDonough, and Irene Menear helped with course planning or leading during the period. Social Science courses on contemporary issues have been offered at TMI from the late 1950s' preoccupation with decolonization and economic development. The guest economists interviewed in courses include Myron Frankman on development, Eric Kierans on Canadian issues, Bernard Lonergan on macroeconomic dynamics, Frank Muller on the environment, Caroline Pestieau on international issues, Gregory Baum and Kari Levitt on Karl Polanyi, and Abraham Rotstein with Alfred Eichner on economic theory and policy.

Last, but not least, I was greatly helped in writing this book by comments from Philip McShane, Caroline Pestieau, Abraham Rotstein and anonymous reviewers, by the editing of Wendy Dayton, the ideas of Richard Menear, and the publishing expertise of David Price.

In any stage of human history, from prehistoric caves to the utopias which our prophets describe with such vivid detail, among primitive fruit gatherers, among hunters and fishers, in the first dawn of agricultural civilization, along Egypt's Nile and Babylon's Euphrates, under India's mysticism, China's polish, Greek thought, Roman law, through the turmoil of the dark age and the ferment of the medieval period, in the European expansion and the modern world, everywhere one finds the pulsating flow, the rhythmic series, of the economic activities of man . . .

Thus the material fabric of culture's living home is economic, and underlying this superstructure there stands as foundation the purely economic field concerned with nourishment, shelter, clothing, utilities, services, and amusement . . .The object of our investigation will be the general rhythm inasmuch as it is foundation and material fabric; or inversely, we are to study the pulsating flow of human action except insofar as it is purely cultural. At a later stage in the argument, when we exclude primitive economies—nomadic tribes of hunters, isolated feudal estates—it will be possible to give sharper contours, more clear-cut definitions, to the economic field. For then we shall take into account the juridical concepts of property and exchange . . .

– BERNARD LONERGAN

Chapter One

WHAT IS AN ECONOMY?

Defining the Question

What is an economy? One usual reply is that it is the way we get what we need and want. Obviously, we need food, clothing, and shelter to survive physically. And we don't need reminding that we also need people to raise us when we're born, to teach us how to live in our community and world. It goes without saying, too, that most of us need friends and mates to love us. Finally, we all want to develop, as fully as possible, as the human beings we truly are. The Lonergan quotation that introduces this chapter tells us that the economic factor is an element in every part of our lives—that the economy is an element of our ever-changing human history. Even the most important and beautiful human activities have a cost—at least in terms of choosing one activity instead of another. To reiterate, every activity that creates the possibility of a good life by providing food, shelter, learning, or enjoyment is at least partly economic.

From the very beginning of time, people have struggled to find food, clothing, and shelter. They stayed alive thanks to their wits and energy. People must have grouped together for survival and reproduction much as other animals do. But their developing human intelligence and language soon meant that enterprising men and women began inventing better ways to hunt for game, or to find tastier berries or drier shelter. Today, we know of beautiful cave or rock drawings and elaborate shelters or burial places that, even in prehistoric times, spoke of the human spirit. As well, preserved traces of earlier humans from Denmark and the Italian mountains show us how cleverly these ancestors developed weapons, food, and clothing for their survival.

To organize discussion of the question *What is an Economy?* I intend to follow the distinctions that Robert L. Heilbroner uses in his popular book, *The Making of Economic Society*.[1] Heilbroner, who was an economist at the New School for Social Research in New

York, divides economies into three categories according to the way in which goods are produced and distributed: *traditional, command,* and *market economies*. This division helps us to understand economies but, as we shall see, no real economy fits neatly into any one slot. Economies can, however, be distinguished according to the type of economic organization that is dominant. *Traditional economies* are characterized by small, independent communities of people that rely on local resources for their livelihood and share among themselves what they produce.[2] *Command economies* depend on the central organization of production as well as the distribution of what is produced by the acknowledged authority. In *market economies*, production is largely organized for sale in markets that can be local or global. Producers for markets earn their income directly and according to the results of their market production and sales.

Traditional Economies

In the *traditional economy* of nomadic societies, hunter-gatherers engage in production by killing animals or fishing, as well as by gathering berries and other edible plants. The traditional economy can also include subsistence agriculture, in which people grow food for their own consumption. Kinship groups of relatives and neighbours usually share on the basis of their ability to produce, their status, or their relationship to the leader or chief. (Think of warlords or traditional tribal or community leaders in countries today.) Yet although successful hunters might often be rewarded with the better portions of the animal killed, life was not always idyllic. The Canadian Inuit movie, *The Fast Runner*, shows how the group may reject the unsuccessful hunter and his family because the other hunters cannot produce enough food for all. During a long Arctic winter or a tropical drought, groups that are, in fact, economically independent often find it hard to survive. In such kinship societies, the community sometimes finds it hard to motivate members to produce enough for everyone's needs.[3]

Because of the importance of traditional farming in ancient Greece, the philosopher Aristotle thought that household provisioning *was* the economy. Trade or commerce was a less important activity operating on the edges of society. Today in Brazil, the Portuguese word *fazendaria*, which means the government's department of finance, is derived from the word for a landowner's estate or household, *fazenda*. Spanish American terms are similar. In ancient Greece and early America, the household constituted the economy, in the sense that it had to be more or less self-sufficient in production and consumption. And some of the American hemisphere's pioneers actually ran quite independent household economies. Clearly, the more isolated a social group is, the less opportunity there is to exchange. However, as soon as groups come into contact with others, exchange or trade becomes a possibility. Soon tokens appear, acting as a medium of exchange or money.

Even in our complex industrial economies of today, communal production and sharing persists within families, in small independent communities, or in cooperatives. *Cooperatives* are associations of members that can organize production, distribution, or consumption. For example, farmers may form circles to learn new methods of production, to buy equipment and seed, and to market their produce.[4] In small societies, or when social groups are isolated by geography or social exclusion, cooperatives are often the only way to organize the economy.

Yet in traditional economies of hunters and subsistence farmers, people's choices are limited. What people eat, where they live, and how they enjoy themselves changes slowly. There are good years of plenty, not to mention the difficult years of famine when life becomes a daily struggle to find water, food, and shelter to survive. Today, in some parts of the world, people continue to live in these communal economies. They have basic food and shelter but little education, transport, or communication. To improve their lives, they sometimes move to big cities or, if they can, to other countries. Documentaries about refugees and natural disasters remind us of groups who continue to subsist in traditional societies and economies.

Such insecurity inspires inventive leaders to organize their economies in ways that ensure the ready availability of what their societies need to survive. The Bible story of Joseph, who stored grain in Egypt when the harvest was good in order to have grain to eat during the lean years of poor harvests, is but one example. Yet even there, economic planning and distribution depended on political arrangements continuing over time. Who, for example, was to store the grain? And how would it be distributed when food was eventually in short supply?

Ancient and Modern Command Economies

A second way of organizing the economy is by centralizing production decisions in the hands of the state or an acknowledged authority. Such a society, Heilbroner tells us, has a *command economy*. A society large enough to have formal rules, tasks, and roles assigned by a king or emperor could well organize economic life so that grain in the years of plenty could be stored to feed people in the years of famine. One solution was to control the spring floods during the rainy season in order to provide water for a growing season in fields farther from the rivers. Such better organized states grew initially from the extended power and responsibility of the householder farmers or hunters who not only successfully cared for their households or clans but also recognized new technical possibilities of production and organization.

The Ancient Middle East

In the temple or palace states of ancient Iraq (Mesopotamia) and Egypt, production of food depended on the management of rivers (the Tigris, Euphrates, and Nile), through irrigation and flood control. Ancient Mesopotamians organized economic life for survival in a geography that depended on managing the variable rainfall and river flows. Feeding the population of soldiers, sailors, and pyramid builders, while maintaining irrigation systems and flood control for farmers, required a strong central control of the economy.

Temple priests or government officials were in charge. They organized and collected the surplus production of peasants who worked the irrigated land. The surplus could be used by the state to provision those involved in defence, the arts, sciences, philosophy, religious liturgies, and statecraft. The government supported the craftsmen who made tools, weapons, and clothing. But the surplus was limited by the agricultural productivity of the economy and the tributes from wars. It was the priests or state officials who were responsible for distributing much of the food and clothing, as well as reselling through merchants the food and other surpluses of the temple or palace. In the complex societies of Babylon and Egypt, the temple and palace officials also bought the other goods they needed, but did not produce themselves, from merchants, paying for them with money. The merchants acted on behalf of the priests of the temple or the rulers of the palace.

The temple or palace was also the political and legal centre of society, the heart of operations, responsible for making and reforming laws, and cancelling debts. It is interesting, however, to note that while consumption debts were cancelled periodically, the practice did not apply to debts that were loans for business investments. Interestingly, archeological and documentary evidence shows trade in such widely used goods as salt, grindstones, and pottery as well as trade in luxuries such as precious stones and metals.[5]

Greece and Rome

During the same period of history, the Greek city-states depended even more on trade than did the societies and empires built around the great river systems. For example, they depended for food supplies on the transport of grain by sea, with Athens maintaining a navy to secure the trade. As well the governments acted to ensure food, shelter, and security for their populations by building harbours that would receive grain and other shipments and also meet the needs of their navies. A number of these activities used merchants, among others, to provide the many services needed in these complex and sophisticated societies.[6]

In Greece, owning land was important not only for growing food, but also as a source of wealth and status (dependent, of course, on the size of one's land holding). Initially, only citizens could own land in ancient Greece and Rome. It was the slaves and tenants who worked the land. Wealth was respected, and wealthy citizens were expected, in return for the honour in which they were held, to sponsor public events as well as public buildings, and statues, much as do today's wealthy and successful people who sometimes give to socially valued organizations and activities. In this way, the surpluses enjoyed by the few could be used to benefit society as a whole. In time of war, Greek citizens were usually expected to provide their own weapons and armour. As well, although there was no tax on land, the state could raise a temporary war tax. The state also received tributes from wars, although such income was irregular.

The Roman imperial state tried to provide for the material wants of its population. The land tax became a large source of government revenue, and taxes were levied on trade. Tax income flowed in from the Roman colonies as well. But the taxing power of the state changed during the period of the Roman Empire, which reached the limits of its expansion some time during the first century of the Common Era (CE). Over time, taxes were shifted to the poorer part of the population. As in ancient Greece, the poor in the Roman Empire were usually sent as colonists around the Mediterranean. Or they could earn their living as rowers for the navy. In both Rome and Constantinople, free corn was distributed to the poor to keep the peace.[7] By the third century, however, tax revenues could no longer meet the growing costs of supplying the Roman army that was fighting at the frontiers of the empire. There was simply not enough manpower for both food production and war.

The early Greek and Roman cultures differed from the ancient near Eastern cultures in their social and power structures. All, however, reflected the potential of their geography to sustain their population, at least in part. Early Greek and Roman economies did not require centralized economic organization. Indeed, although farms could be very large, the smaller farms could be worked independently. The Mediterranean economies produced grains, olives, wine, and pasture for small animals, thus allowing the early Greeks and Romans to support themselves on smaller plots of land. Private ownership of land was possible, as was private trade and private manufacture. Middle Eastern cultures did need command structures to organize agriculture around rivers that flooded or in fields that could be watered by irrigation. Palaces or temples organized not only people's economic life, but also that of politics, the military, and religion. There was little private ownership, and no word existed in their languages for "freedom."

After the time of Alexander the Great, the cultural differences between the near East and the West lessened. For one thing, the near East was to become part of the Roman Empire by the end of the first century CE. It seems that the ancient societies, unlike modern societies, had no concept of the "inalienable" rights of individuals. In effect, people were politically unequal and slaves abounded. Women were not considered citizens; nor were most colonials in the Roman Empire. But the differences among these ancient economic organizations were reflected in their cultures. For instance, the meaning of life in the near Eastern cultures of Babylon, Egypt, and the Indus River depended on their leaders as well as on their people being in tune with the world of nature and its creator. The political authority or the leader of a country was often regarded as god. The Greeks in the west, in a development paralleled by the emergence of Confucian ethics in China and the development of Hinduism and Buddhism in India, began to distinguish within this cosmological view the place of human beings as individuals—individuals capable of questioning and understanding themselves, nature, and the society in which they lived.

Modern Command Economies

In a *command economy*, people follow the production plans of the state and receive in return what the state decides they are entitled to. For command economies to work, the initiatives and choices of individuals tend to be restricted. Recently, however, we have seen changes in command economies; witness the breakup of the Soviet Union and China's shift in practices that allowed entrepreneurs to produce for sale in a parallel market economy. Yet central planners in command economies have shown themselves to be incapable of collecting the information needed to coordinate complex production systems, with the result that different products are under- or overproduced.

Karl Polanyi, in discussing the clear importance of the state in ancient economies, argued that an unregulated market economy is an aberration that emerged in the nineteenth century, only to disappear with the re-emergence of the state's key role in the economy. Certainly, the role of the state in the economy grew during the twentieth century, even in the industrialized countries of Europe and North America. But today, most of the production of goods and services in those countries remains in private hands. However, corporations, banks, and other civil institutions are expected to operate under the laws and regulations imposed by the state. Clearly, some features of the command economy are present in today's economies. But we expect that our governments' laws and regulations, the way the courts apply them, and our own economic activity in corporations and other private businesses and organizations will all serve to define both how the economy works and the government's role in society.

Market Economies

Following Heilbroner's distinctions, we examine the third category of the economy—*market economies*. Markets provide ways of completing production through sales, and ways of providing producers with information about what to produce. Markets also herald needed changes in production. In effect, market information about what is selling well can direct the future production of goods and services. In a market economy, society lets individuals or corporations decide what to produce. Both parties take the risk of producing a product, and they must sell their product or go out of business. Thus markets discipline producers, whose role it is to bring to market what other people want. As what is produced is intended for sale, producers expect to be reimbursed for their efforts. By each specializing in what each one can best produce and sell to others who want it, everyone benefits. The so-called *invisible hand* of the market can be said to organize production.

We are sometimes critical of the goods and services that appear in markets. Yet if people do not buy these goods and services, they will no longer be produced. In a market economy, consumers are free to spend their income as they wish, and they express their choice or preference every time they do so. Yet apart from advertising that both informs consumers and influences them for better or worse, markets have nothing to say about what people should buy or sell. The market's wisdom is "buyer beware." Of course, governments can influence what is bought and sold through food and other product regulations, through the tax system (on cigarettes, gasoline, and alcoholic drinks), and via laws about drugs, hand guns, and so on.

Kinds of Markets

Is a market a place or an idea—a horizontal or a vertical space? It can be both. A *farmers' market* is a place where producers bring the food they have grown (apples, honey, cranberries). But markets such as the *world market for crude oil* are really more of an idea that is based on shared information. For example, oil is bought by consumers and sold by producers at a price determined by the Organization of Petroleum Exporting Countries (OPEC), as well as by other buyers and sellers and their brokers in regulated markets in New York, London, and Singapore. The price differences depend on the purity of the oil and the oil's distance from markets. Other qualities of petroleum are then assigned higher or lower prices. When world oil prices are high enough, it becomes possible to produce and sell oil made from such sources as the Canadian tar sands, the production costs of which are higher, in terms of energy and labour, than the cost of pumping oil from underground or undersea deposits.

What determines world prices for commodities such as oil? The answer is the same as in most other markets: the quantity supplied, the quantity demanded, and people's expectations for the future. For example, if a cold winter is expected, the demand for oil to heat houses in cold regions will rise, as will the oil price. Unrest in oil-producing countries can also cause the world price to rise; in this case, people are worried about their future supply of oil. When commodities such as oil and gold are sold on world markets, suppliers can influence the market supply via the group decisions of producer cartels such as OPEC. In effect, cartels can limit production, which will raise prices if the quantity demanded does not change. During the 1970s, for instance, OPEC producers raised their prices to obtain better revenue for their oil. With these higher prices, Britain and Norway could pay their own higher offshore production costs and still make a profit. Meanwhile, economies fell into recession, thanks to the oil price shock and other factors. The recession reduced economies' demand for oil, and the oil prices fell.

Most of what we consume, though, we do not buy in farmers' markets or world markets. What sorts of markets do we use? In fact, most products that we buy—both goods (cell phones, aircraft, cars) and services (education, travel, estheticians)—are sold in *monopolistically competitive* markets.[8] They are *competitive* because other producers can innovate to offer new goods and services, also what people are willing to buy in markets does change. They are *monopolistic* because they offer the buyer a unique brand with a service that cannot be precisely duplicated. Competitiveness is restricted when new firms cannot enter production because of high initial costs, patents owned by firms already in place, or similar advantages in advertising or geographic position. In time, monopolistic power is limited as technologies change or people's tastes change. The advantage of monopolistically competitive markets is the choice they offer to people of different tastes and incomes. Nowadays, consumers have endless choices not only in cars but in most other products.

Let's take the example of consumers choosing clothes. We can buy clothes at a large discount store or in a second-hand store. We can also buy at local clothing stores, where the buyers share our taste and we trust their advice and prices. Final outlets for the production of clothes are known as "retailers," who advertise and sell in large and small-specialized markets. In discount stores, customers are willing to spend more time to find what they want at a lower price. Contrast this with successful local stores where owners get to know their customers and customers are willing to pay for the owner's ability to supply them with the clothes they want.

Here, the consumer is buying clothes *and* the services or salesmanship of the storeowner. So in such monopolistically competitive markets both the cost and the price would be higher, the choice and time saving might, in the end, be worth it.

Limits of Market Economies

In general, buying and selling in a market economy gives people some freedom to choose how they want to live, how they will satisfy their needs and wants, and how they will decide to produce in order to earn their living. But the price of this freedom is work—in some kind of production of goods or services, and for income according to our capabilities and choices.

Bernard Lonergan commented on the dynamism and limits of a market economy as follows:

> Economic process is a shifting network of exchanges in which firms supply households with goods and services while members of households seek work and receive income from firms. Within any given country the network may expand as resourceful individuals at their own risk add to the routes of trade, to the goods produced, or to the services rendered. Moreover, when the numbers of buyers and sellers are large enough, prices paid and received will tend towards a single price that clears the market.
>
> Men are unequal in ability and in opportunity. Accordingly, if the productive processes are to yield their maximum of human satisfactions, then it is necessary that the less fortunate be able to demand more than they can supply, while the more fortunate supply more than they demand. Of itself, the productive process can give the fortunate more than they desire; moreover, it would like to treat all with a generous hand, for only by such generosity can it attain its maximum. But the delicate balancing of supply and demand necessarily limits each successive group of less fortunate men to the lower standard of living that their abilities and opportunities can command in the market.
>
> Against this artificial nemesis humanitarian idealism revolts. A rigidly egalitarian system belongs to a perfectly egalitarian world; a world in which men are, in fact, unequal must find a different system.[9]

While Lonergan understands the limits of the market economy, he does not think a rigidly egalitarian economy will provide a solution. Of course, markets ignore production that is not for sale. But it may still be socially important. How, then, is such nonmarket production to be organized? True, markets may be the most productive way of organizing economies, but they do not entirely meet our human needs and wants. For example, while market freedom allows human beings to invent and innovate, adapting to changes in market production can sometimes disrupt people's lives. Furthermore, not everyone thrives in a competitive environment. As Lonergan suggests, market economies need to be supplemented. He did not say how that might be done. But today we do see surpluses created by market economies being invested by governments and private institutions in order to produce goods and services in government agencies (hospitals, schools) and in nonprofit private institutions (the Red Cross, the Boy Scouts, church and sports organizations).

Mixed Economies

Many successful and productive economies are now *mixed economies*. Take the entrepreneurs, corporations, and other for-profit producers that coexist with nonprofit producers of goods and services who work in cooperatives, some incorporated organizations, or government agencies. These nonprofit enterprises usually raise funds from governments, business, and generous people for some or all of their costs of production. Such fundraising and the receipt of grants help to finance the production of goods and services that social groups are willing to support. Nonprofit organizations also depend on the work of volunteers, or those who do not need to work in full-time production for the income they decide they need. Much like any business enterprise in the for-profit economy, nonprofit organizations that receive financial support in public as well as private grants and donations are required by law to keep accounts and to operate efficiently—in short, to balance their books and cover their costs of operation. However, such organizations may be held to account in ways that constrain their growth and development; for example, investment for the future may be discouraged if grants do not allow for an organization's replacement investment and growth.

Finally, governments themselves are also economic actors. They provide public services directly or indirectly through agencies, services that are paid for through our taxes. The fruits of the public services are many: highways; defence; justice; health care; and welfare benefits for those who cannot work, have low incomes, or are changing jobs in a shifting market economy.

Summary

In this chapter, we explored various different ways of organizing economic life so that we can consume enough to survive and yet still have a life that is as fulfilling as possible. Although Robert Heilbroner, in his study of economic society, distinguished three dominant ways of organizing economic life, we find that today's actual economies have both market and command features. Moreover, different societies emphasize different features, as do people with different cultural histories. We find, too, that all economies retain traditional features, especially within families. Think of the importance of the remittances that foreign workers send home to their families in poor countries. Clearly, every economy is organized to produce and distribute the goods and services that people, their governments, and civil society groups decide they need and want. In the coming chapters, we turn to questions about production, money, and distribution.

The term 'productive process' is to be used broadly. It denotes not merely "making things" but the extraction or cultivation of raw materials, their transportation and assembly, the planning and designing of products, processing and distribution. It includes not only activities upon material objects but also services of all kinds, not only labour but also management, and not only production management but also sales management . . .

The productive process is, then, the aggregate of activities proceeding from the potentialities of nature and terminating in a standard of living . . .

Consumer goods and services enter directly into a standard of living. Producer goods and services enter indirectly into a standard of living: directly they are improvements upon nature that facilitate the productive process and increase its power and efficacy, and only indirectly, through this increased power and efficacy, do they affect the standard of living by improving and increasing the supply of consumer goods and services.

— BERNARD LONERGAN

Chapter Two

IN THE BEGINNING WAS PRODUCTION

Why Production Comes First

In his writings, Bernard Lonergan emphasizes that production is both central to economies, and best understood as an evolving process that is driven by innovation and growth. The importance of production is sometimes overshadowed in the modern, dominantly market exchange economy in which we live. Markets focus on supply, demand, and price. We think about the present and expected supply of goods or services and how to get the best price. We think less about the changing channels of the productive process that creates the array of goods and services in our standard of living. A standard of living includes at least food, shelter, the possibility of reproducing ourselves, and whatever gives meaning to our lives. Without production, there would be no economy, no society. Human beings would certainly die off.

Production can be understood very broadly. All human activity that achieves some purpose, even without aiming to do so, can be considered to be production. Sleeping prepares us for future productive activity, as does eating or enjoying ourselves. Still, economists keep the term *production* for activity that uses human, animal, and physical resources to prepare scarce goods and services for consumption. *Scarce goods and services* are things that would not exist if we did not produce them. While some goods like berries or salmon may be plentiful in the wild, they need to be gathered or fished, that is, produced, before we can consume them. And because scarce goods are limited in supply, we must decide how to share them. We can think of production as growing food; transporting it to market; building cars or houses; running a bank; organizing a symphony concert series; and mining, refining, and distributing oil and gas.

Production for Profit and Markets

Even though we live in a mixed economy, much of what is produced will be sold in markets in the hope of making a profit. Yet, a small but growing proportion of production for markets resides in the nonprofit part of the private economy. Families have also been production centres for food, clothing, furniture, and even housing. But nowadays, both parents often work outside the home and buy what they need from others.

In effect, market, non-profit, and family production are in the *private sector* of the economy. Individuals and groups can organize the private sector, if a country's laws, regulations, and culture provide a suitable social framework. The *public sector* of the economy, which is also nonprofit, is called "public" because the government organizes it. We can think of public schools, public hospitals, public transport, public security, public daycare, and so on.

Because it is still the largest part of our mixed economy we will look first at *market production for profit.* Often, people who turn their talents to business really enjoy the challenge and stress of generating ideas and producing some good or service for which they see a place in the market. The good or service may be something that is now in short supply, or one with a market that is expected to grow; or the businessperson may be creating a new product. There is risk of failure, of course. But for many people, meeting challenges is part of life in their field of activity. Successful business people are often well rewarded for their enterprise.

Adapting to change is crucial in market economies, because people continue to spawn new ideas in all areas of their lives. At least some of these ideas will lead to innovations in production and bring new products or better old products to market. Because production in market economies is so dynamic, societies can face crises if they have not developed institutions to take care of those needs of societies that are not being met by the market. Examples include assisting people who are adapting to changes in production or to new jobs.

Corporations as Producers

Much of the production in the private for-profit economy occurs in large corporations. What are corporations? Historically, once production was mechanized and organized in factories, businesses needed more money and credit or *financial capital.* So, business people and their friends invested together in what came to be called a *joint stock company*. Investing in a share of a business spreads the risk of failure among more people. Each stockholder owns shares in the company, and when the company succeeds, each owner receives a share in the profits. Today, dividends are the profits that shareholders receive. To further limit the business risk of shareholders in the joint stock company, laws were passed to give shareholders *limited liability* in a company. The law ensured that, when a company went bankrupt, shareholders could lose only up to the value of their shares.

During the nineteenth century, laws were developed to help businesses succeed. Factory owners made major investments and wanted to operate permanently. Bankruptcy laws were put in place to reduce the risk of failing and to give companies time to reorganize when they got into difficulties. A corporation came to be regarded in law as a person with the same rights as individuals. These corporations were not limited to operating in a particular location, nor for a single purpose or time period. Corporations could merge or acquire other companies, or be a part owner of another corporation by buying its stock. As many companies grew into large corporations, shareholders became less and less involved in company management. Today, even though they may be part owners of a corporation, individual shareholders cannot influence managers unless they act as a group, or own at least three percent of the shares.

Corporations, because of their size and power, also have an important say about what is produced for markets. But corporations are increasingly required by law to meet health and safety standards, to be more transparent in their advertising and hiring, and to publish more complete reports of their operations. Corporate managers are hired by boards of directors not only to manage the corporation's production, but also to act as entrepreneurs for the owners or shareholders of the corporation. And the managers make the decisions about production. When there are many small shareholders, the separation of owners (shareholders) and managers tends to increase the power of the managers.

However, both shareholders and managers often have only short-term interests in the corporation. Shareholders may be interested exclusively in dividends and rising share values, rather than in the corporation's plans for future production. For their part, managers may be seduced by the power and lifestyle that their current success makes possible. They may not be attending enough to the directions in which the corporation could invest its profits or in preparing for future production.[10]

The power of corporations can be limited as well by labour unions and government regulations. For example, The Sarbanes-Oxley Act in the United States was a government response to corporate scandals and to the questionable actions of corporate managers that led to major losses for shareholders. The act restricted accounting firms from acting as financial consultants for firms for whom they also act as public auditors. Otherwise, the accounting firms would be in conflict of interest. The problem is that auditors are expected to confirm that corporations meet legal requirements in their annually reported financial operations, while financial consultants advise corporations on how to maximize their financial profits. The Sarbanes-Oxley Act has been criticized for making top management responsible for a corporation's risk controls, but many businessmen find that it has made relations between different business units in large corporations more transparent.[11]

In their classic analysis of business, *The Modern Corporation and Private Property* written in 1933, Adolphe Berle and Gardiner Means were already arguing that corporations were becoming the dominant institutions of the modern world. From time to time, social thinkers and economists like Berle and Means have argued that corporations should not only produce goods and services but, because of their power, should also serve the interests of society as a whole. They argue that corporate managers' personal interests may conflict with the interests of their shareholders, employees, and society as a whole. However, others argue that social action by corporations is undesirable as government and civil society organizations already have that social role.[12]

Friedrich Hayek, one of the great economic thinkers of the twentieth century who has written on many related social issues, argues that corporations are responsible to their shareholders, that it is the shareholders who should receive the annual profits of the corporation and decide whether to continue investing in that corporation. Hayek identified four groups who might claim that corporations ought to be run in their interest: management, labour, stockholders, and the public at large. The first group, said Hayek, is a danger to be guarded against. The interests of the second group, he felt, would not fit with those of workers in general or of society itself. In effect, unions act for the benefit of their members but don't help independent workers who do not belong to a union. Moreover, unions and professional associations have been criticized for restricting their membership and access to jobs. And European labour unions have been criticized for harming the economy by delaying economic change. Hayek concluded that corporations must produce as efficiently as possible, making the best use of their human and material resources. Doing so would maximize the corporations' long-run profit. But Hayek added that the pursuit of profit is "to be restrained by general legal *and* moral rules" and the "generally accepted rules of decency and perhaps even charitableness."[13] Hayek sees that the market economy, as we know it, has to be part of some broader production of goods and services that reflects human values more fully.

The need to balance the pursuit of profit in production with some way of meeting broader human values is a concern of shareholders as well as corporate managers. Hayek spoke of shareholders actively participating in decisions at annual meetings. He also proposed that corporations cease investing in other corporations or using non-voting shares. Even today, changing corporate law to better balance power in the society remains an unresolved issue.[14]

Nowadays, governments tend to support corporations through incentives, regulations, and subsidies. They worry that corporations might move to another country and take jobs and wealth with them. In a global economy, government policies do need to consider how other countries treat their corporations. To better balance economic power governments could help small businesses start up or grow, while limiting by law any large corporation's monopoly power in a single industry.

Public or Government Production

The production initiated by governments constitutes the second largest sector in a mixed economy. Its size relative to the private business sector varies from country to country, although in most industrialized countries the national government accounts for about forty percent of the economy.[15] But government production is only part of governments' activities. Traditionally, governments provide defence and infrastructure (roads and ferries, subsidies to public transport in cities, and electricity). They train armies and design and make weapons and bombs, meanwhile participating in international organizations to ensure defense and security. Governments also subsidize agriculture and manage public lands and waterways. They subsidize regions in temporary economic difficulty or in transition from one type of production to another.

Of course, we have to pay for these goods and services. In many countries, people have come to accept that their tax money, in addition to maintaining public order, the economy, and national defence, helps families and individuals when they are sick and old, when they care for dependents, or when they need education and job training. We also accept that our governments subsidize the arts and sciences that humanize our lives. What people expect from government is expressed in a country's laws and customs, their votes in elections, and via ever-increasing use of interactive media. And lobby groups act to keep governments' attention on the private and commercial issues that concern them. In the end, the level of government activities clearly rests on the extent to which people are willing to transfer income to governments in taxes, and how politically active people are in changing government policies. In most industrialized countries, the lowest-income earners do not pay taxes but, instead, receive benefits to help maintain their income levels.[16]

In a *mixed economy* there is a mix of public (state) and private (corporate or other business) provision of most services. There is still much discussion about the appropriate balance between the two. Just as corporations can behave in their own interests to the disadvantage of society as a whole, government services can fail. For example, the public provision of water can be technically incompetent, or badly managed, as when authorities fail to plan for repairs or for growth in the system. Government services can also be distorted by political pressure from lobby groups. New ways of combining market production and government production are also being developed. For example, would some combination of private and public health care and education improve the services? Would private competition improve the government provision of public goods? Note that some U.S. state governments have introduced a cash payment to parents so they can choose the school they prefer for their children. In Canada, parents are offered a subsidy or low-cost daycare to help them choose how to care for their preschool children. Although Canadians enjoy a public health care system, they can choose to pay for special tests, drugs, or operations that the public system does not yet pay for, or for which there are long delays. As well, provincial governments in Canada make different spending decisions for their health and daycare programs. One example is the five-dollar-a-day daycare program offered in Quebec communities. Another is the fact that non-residents of British Columbia pay for their healthcare and collect from their own province's program.

Both the for-profit private sector and governments face economic discipline or limits. Companies can advertise to keep consumers interested in their product, but they must sell their goods in the markets or declare bankruptcy. Governments must balance their budgets every year or so. In short, if public services cost more than tax revenues, governments will have to either raise taxes or cut services. Otherwise, the government debt will keep rising, as does debt in any household. Eventually, the debt must be paid by future taxes. Still no government's debt is zero, and governments seem to manage their debt as long as the economy is growing faster than the debt, interest on the debt is low, and the size of the debt is a small proportion of national income.

Nonprofit Production and Volunteering

Another production sector that is growing in importance is the private nonprofit corporation (or organization) and the volunteer sector. The volunteer sector has only recently been measured in national statistics.[17] Volunteers generally provide services that supplement the governments' health and education services, services that in the past were performed by families. The nonprofit sector has also been a source of innovation in the provision of social services. The nonprofit organizations, often incorporated, are supported by private donors or receive government subsidies or grants. Such organizations sometimes act as lobby groups to draw governments' attention to the social issues for which they seek funding. Groups can act locally or internationally. Non-market production would also include the production of art and some scientific research. These activities may not be marketable in the creator's lifetime, but creative people in the arts and sciences often persist if they can eke out even a bare existence. And good work will generally be recognized. Think of van Gogh or the developer of computers.

Summary

While the central role of production in an economy seems an obvious point, it is not often the starting point when we think about an economy. Advertising, for example, directs us to consumption, while economic reports focus on how much consumers bought and at what prices. Then there are groups that poll us on how we expect to consume in the future. There is a reason for this preoccupation with buying or what economists call *demand*. In our complex market economy, what we help to produce, often in a large corporation, is separate from what we consume. However, producers make the link strongly through advertising. Producers worry about whether people will buy their product instead of a similar one made by someone else. This is especially the concern these days, when producers around the world are often competing with one another for sales in a global market.

Production also occurs beyond the economy. In the first place, we must reproduce ourselves or the world would come to an end. Reproduction is not directly linked to markets, although the economic notions of cost, supply, and demand are economic issues related to reproduction. This indirect link has grown since parents learned to take some control over their reproduction. Because most parents these days are working, the costs of reproduction may be borne in part by corporations and governments through parental leave, the partial provision of daycare, free health care, and education. Because reproduction is generally a social, as well as a private, good, this makes excellent sense when countries can afford it.

However, in poor countries, there can be little government support for reproduction. People often have large families in those parts of the world. It is accepted, for example, that children born in poverty may die before adulthood and that large numbers of children can increase a family's production and security. And indeed, children can work for their family's needs and care for their parents in old age. Although laws generally prevent reproduction from becoming part of the production that is for sale in markets, it is nevertheless an essential part of what is meant by production.

Finally, we have seen that human beings not only produce what they need to eat, wear, or shelter themselves with, but are also artists who want to express themselves creatively through their dress and surroundings, through the performing arts, through their distrust of strangers and their acts of war taken for their own security, and finally, through acts of generosity and love toward other people. This range of human behaviour usually has an economic aspect. Certainly, buying tickets for a symphony or rock concert supports the production of arts and entertainment by musicians. Still the economic aspect does not tell the whole story. We choose our actions, even our actions as consumers, on the basis of our understanding, judgment, and decisions or choices. But this process includes more than just economic considerations of efficiency and getting the most satisfaction from spending our production income.[18]

History tells us how production has changed over time. We rely on innovative people to create the new ideas and take the risks of starting something new in every area of life. We also rely on them in the economy to insert new ideas or methods into the accustomed routines of production. Sometimes one person has the new idea and another will take the risk of changing the production or marketing. Other people are needed, however, to help spread the new kinds of production throughout the economy. Governments can encourage or discourage economic development. For example, in some countries it can take months to obtain government licences to set up a business. But if this is the case, people can only produce informally and on a small scale. Innovation and change are almost out of the question.

This chapter has explored production in a modern mixed economy, one in which producers include enterprising individuals, corporations, civil organizations, and government agencies. We saw that the goal of production is to create the consumer goods and services that people not only need and want, but are willing to pay for with their income from production or other sources, as well as with their taxes. We have tried to see the dynamism of productive activity in a society in which a large degree of free choice is possible; a dynamism that clearly has an important economic aspect but that also fulfills every human desire for what is valuable or worthwhile. The next chapter on *Production in Economic Thought* will consider how economists have understood production and its changes in the light of innovation and growth.

Our inquiry differs radically from traditional economics, in which the ultimate premises are not production and exchange but rather exchange and self-interest, or later, exchange and a vaguely defined psychological situation. Our aim is to prescind from human psychology that, in the first place, we may define the objective situation with which man has to deal, and, in the second place, define the psychological attitude that has to be adopted if man is to deal successfully with economic problems.

Now in such matters, first there occur the objective relationships, secondly occurs observation of them, thirdly there is the series of ever less unsuccessful attempts to deal with them, and finally emerge the economists who eventually eliminate their differences of opinion and establish a reasoned view.

– BERNARD LONERGAN

Chapter Three

PRODUCTION IN ECONOMIC THOUGHT

Before the Industrial Revolution

As soon as philosophy emerged in Greece, China, and India about the fifth century BCE, philosophers began to talk about the morality of social or interpersonal relations. Such relations include economic relations. Aristotle considered the economy and how it ought to work in Book I of his *Politics*. He put a high value on the production, distribution, and consumption that was organized around the large agrarian households, as he knew them. These households organized most production, often done by slaves, to supply the needs of families and those around them. The heads of such households and other men were the citizens of a city-state that passed laws and decided on policies. Aristotle thought that commercial activities, in which goods and services were bought and sold, belonged on the margins of the economy. This was understandable in a society in which economic resources were defined by the limits of agricultural production. Provisioning society and governing it were paramount.[19]

Aristotle's thought influenced the people in the medieval West through contacts between Islamic thinkers, such as Averroes, and Western thinkers such as Thomas Aquinas. Medieval philosophers' questions about morality and economic behaviour focused on how to find a *just* price and a *just* interest rate. The Schoolmen of the later Middle Ages eventually defined the *just price* or wage as "that price or wage that would form itself on a market in the absence of fraud, violence or privilege."[20]

During the medieval period, the development of transport and banking extended markets and trade. The parallel development of technology during the same period led eventually to changes in agricultural production and manufacture. As well, developments in the physical sciences nudged moral philosophers to a systematic analysis of the changing economy.

Adam Smith

Adam Smith is often considered the founder of the discipline of economics. He came to the study of economics as a moral philosopher. The tradition that economics is part of moral philosophy is based on the idea that human beings, through their minds and feelings, seek a meaning for their lives. We find meaning through learning from experience and study and through the decisions we make. Because our economic activities affect other people, they have a moral aspect, in the sense of at least avoiding harm to other people. Moral aspects of economic decisions also include understanding how the economy works and using scarce resources as efficiently as possible

The discipline or the human science of economics has developed through the insights of its scholars who study the economic data and history to evaluate their theories. Early on, Adam Smith recognized that when products are sold in a market, the introducing of a division of labour, or the specializing of tasks in the production of goods or services, would mean that people could produce more and live better. Smith explained that, by pursuing their own interests in this way, people would thereby benefit the common interest. However, Smith understood that a person's own interest included whatever was important to that person. He recognized that beyond vital needs, people also want leisure and the opportunity to express sympathy for others through charity and family support.[21]

During the nineteenth century, economists directed more of their attention to explaining how goods and services are sold in markets after being produced. They studied market equilibrium to understand how changes in supply, demand, and price are related.

Karl Marx

Karl Marx (1818-1883)[22] was a philosopher and economist from Trier, Germany, who lived and wrote in England. Marx built on the work of such classical economists as Adam Smith and David Ricardo. Ricardo, a successful financial advisor to the British government, explained in his writings on economic thought how the division of labour increased productivity or the output per person, how a product's value depended on the labour used to make it, and how the use of machines displaced labour in production.[23]

Marx also thought that it was important to distinguish two kinds of production. The production of producers' goods that can improve and expand production, he called *Department I.* The production of consumers' goods that became part of people's standard of living, he called *Department 2.* He saw the huge changes brought about by the Industrial Revolution. He saw the building up of the industrial machine of producers' goods: factories, equipment, and railways. He saw industry's financial demands for loans, insurance, and gold for industrial development and trade. Finally, he saw the legal introduction of laws that limited companies' risk of doing business, and of patents that would protect inventions in the new industries.

On the other hand, Marx also saw the poverty and distress of people who had lost their rural livelihood during the agricultural revolution that enclosed the landlord's land for the raising of sheep. Sheep produced wool to supply the textile industry that developed first on the continent and, later, in England. The now landless peasants were welcome to work in the mines and factories, but it took time for laws about safety regulations, minimum wages, or health to be put in place to protect them. Landless peasants were also welcome to emigrate to North America and elsewhere. Many did, with more or less success and difficulty.

Marx was right in recognizing that industrial revolutions and economic change in general lead to great social change and human suffering, especially when the returns from the new industrial production are still low. This was the case in the early nineteenth century in England, in the later nineteenth century in Germany, and in the twenty-first century in many countries now in various stages of economic development. Many people have criticized the human suffering caused by the Industrial Revolution. Even today, the low wages in newly industrializing countries cause concern. Other people, however, have asked whether the profits of early industrialization were sufficient to raise the standard of living of all citizens. Was it, in effect, more important to reinvest profits to complete the infrastructure basis of industry for the sake of the greater production of consumer goods that would then result?

The issue of how to distribute or share the income from production is a continuing focus of negotiation in democratic countries even today. During the nineteenth century in England, it took time before all citizens were given a voice in elections. The wages of labour did not increase significantly until 1870. Nor did the laws allow labour organizations to exist. Eventually, as more citizens acquired the right to vote, and socialist movements inspired by Marx and other social reformers influenced groups in society, the government passed protective legislation for workers and their families. In the United States, industrial innovators such as Henry Ford realized that to sell mass-produced products like the Ford car, workers' wages would have to be significantly raised. But the factories, raw materials, and skills needed for mass production had to be developed first. Henry Ford and others like him had to plan, develop, and finance the industrial development that would make mass production possible.

Marx believed that capitalist owners increase their power and wealth by underpaying the workers. He thought that the value of a product is measured by the amount of labour used to manufacture it. But the workers' incomes were less than the value of the goods produced. Marx called the difference surplus value—the profit of the capitalist. Marx's view was that only labour produced value and that the full income from production belonged to the workers. He did not acknowledge the work of the entrepreneur, who recognized the possibility of reorganizing production and took the risk of failing. Nor did he acknowledge the role of the lender of funds (from a financial surplus or through the creation of credit) to finance the enterprise. For Marx, the profit of the capitalist is obtained by exploiting the workers. Marx expected that workers would soon rebel against such exploitation. He foresaw a revolution that would give political power to the workers.[24]

Marx's vision of the future was an ideal world of a classless society. The family, which Marx saw as an institution for the well-to-do bourgeoisie, would, he argued, eventually disappear. In the economy, all people would produce according to their ability and would receive income in return according to their needs. We know now that the history of proletarian revolutions produced no such ideal world. Rather they produced political dictatorships of the left, or fascist dictatorships of the right to prevent revolution. These police states repressed their citizens through their gulags and concentration camps. In the end, centralized economic planning and economic decisions made by state bureaucracies did not work. Productivity, or what each worker produced, was low. Moreover, it proved impossible for bureaucratic planners to coordinate across industries the quantities of inputs and outputs needed in production. The Soviet Union and its satellite countries were criticized by their own economists for excessive production of capital or producers' goods (factories, machines, trained workers, and so forth) and insufficient attention to the production of consumer goods.[25]

Marx viewed history as determined by economic events. This is perhaps not surprising as he lived through a period of major economic and social change during the Industrial Revolution. Marx thought that central planning of economic development would benefit people, and his ideas have been followed in several developing countries. However, support for central planning has declined since the 1991 demise of the Soviet Union. Still, Marx's ideas, and the international socialist political movements they fostered, have led affluent countries to provide more generously for the health, welfare, and employment income of their citizens.

Austrian Economists

During the movements of political emancipation and social change that marked the latter half of the nineteenth century, economists sought to explain the capitalist system of production and markets, as well as to account for its volatility. Austrian economists such as Hayek and Schumpeter challenged Marx's belief that production dynamics and accumulation would destroy capitalism in a socialist revolution and create a planned economy.

Hayek thought that central planning must end in political repression because the ideas of everyone except the planners would be suppressed. Hayek discussed, as Marx had, the conditions of equilibrium between the production of consumers' goods and the production of producers' goods. For Hayek, it was important that the share of money income spent on consumer goods and capital goods matched the changes in each kind of production. Hayek noted that "it is only because a number of individuals had decided to spend a smaller share of their total money receipts on consumption and a larger share on production" that there was "any change in the structure of production."[26] This is Hayek's way of describing how increasing investment in producer goods can increase the output of a given set of resources and labour.[27] Because of increased productivity of the original means of production, land and labour are freed up to produce added consumer goods. But while the potential output of consumer goods has increased, a rise in actual production and sales depends on income shifting from those with high-incomes to people who spend most of their income on consumption.

Hayek was very concerned that the monetary authorities would mismanage increases in money and credit. He thought that there was a great danger of inflationary price increases. Hayek's attention focused more on the role of price in production decisions and the effect of new money and credit in the process. He contended that when new money and credit are added to the economy, consumer prices would rise because the supply of consumer goods has not changed. And when consumer prices rise, he argued, producers would shift their production from building new capital toward making more consumer goods. Hayek's emphasis on money, credit, and prices gave less attention to producers' expected real return, or the profit on their investment, in the new and/or better means of production. Other economists recognized that the prospect of profit would tend to ensure that producers would complete the development they had begun.

Joseph Schumpeter, an important Austrian economist of the same period, also added to our understanding in a major way by writing his *Theory of Economic Development.*[28] He explained that for development to take place the entrepreneur must acquire new money and credit to assemble the equipment, people, and materials he needs to put his new ideas into production. Otherwise, products that flow from the new enterprise would tend to lower prices and discourage business people. Without new credit, said Schumpeter, development can only come from increases in saving. People would have to consume less to save more, and business owners would be discouraged by their sales results. It can be argued that the need for a money supply that grows along with the rate of production in the economy was not well understood until after the disastrous credit restrictions that followed the 1929 stock market crash. As the next chapter on *What is Money?* will explain, banks use the money, which people deposit, as reserves to back up their loans to businesses. In the early twentieth century, banks called in loans when economic risks increased in a crisis, or when they feared a run for cash by depositors. This reduction of credit was hard on businesses and increased the number of bankruptcies. More jobs disappeared as more businesses closed their doors. Although Schumpeter saw the importance of new money and credit, his theory of economic development made clear that it is the real innovations, which change production, that cause economic development.

Schumpeter knew the work of French economists like Leon Walras who, by 1877, had published his work on multi-market equilibrium that built on Quesnay's *tableau économique*. Walras understood that while the economy tends toward equilibrium prices and wages in markets, it never reaches them. The problem is that, in actual economies, the variables that are taken as fixed by economists as they analyze the tendency toward equilibrium, do change.[29] Schumpeter, unlike Walras, did address development in which production and income variables changed. He was interested in understanding how, in fact, the dynamic economy tended to equilibrium as new forms of production were introduced. What happened to the production of producer and consumer goods, and what happened to prices and wages over the transition? He recognized that there was a lag between the production of new capital or producer goods and the production of new consumer goods that the new capital goods made possible. Further, he drew attention to the fact that prices of consumer goods are unusually high during the production lag. This was so because new money and credit added to the economy allows entrepreneurs to bring new ideas into production, to employ new workers, and to create new incomes that would increase demand for consumer goods.

Schumpeter thought that development would need a theory different from the theory of a stationary economy, or of one that was simply growing. He built his theory of economic development around the entrepreneur's innovations and the new money and credit needed to make the innovations work. For Schumpeter, development dynamics started with an expansion and tended to be followed by a crisis. The crisis could happen because loans were paid off and not renewed following the expansion. That meant that credit would be in short supply, if the economic climate discouraged further bank lending. Schumpeter also thought that the "trustification of business," as he called the financial control of large companies, allowed them to protect themselves in an economic decline. In other words, profits are protected in stronger firms and weaker firms go bankrupt. A spiral of decline in production would follow, leading to the disappearance of jobs, a loss of income, and a fall in consumer sales.

Bernard Lonergan

The philosopher and theologian Bernard Lonergan took time during the economic decline of the Great Depression to delve into economics. He pondered how the economists understood the crisis and whether it could have been avoided. In 1942 and 1944, Lonergan wrote two economics essays explaining his understanding of *economic dynamics*. His hypothesis outlines how prices depend not only on supply and demand, but also on the constraints of the production phases in an economy that is evolving or developing. Lonergan had read works by Hayek, Keynes, and Schumpeter and several other economists.[30] Like Marx and the Austrian economists Lonergan distinguished producer goods from consumer goods in production. Like Hayek, Lonergan looked for a normative theory of the economy as it changes and evolves. Like Schumpeter, he understood that static theory could not explain the dynamics of development.

In the outline of the argument of his 1944 essay, Lonergan states that from the relations between production and the circulation of money in development and growth, it follows that "prices cannot be regarded as ultimate norms guiding strategic economic decisions." He sees that the "function of prices is merely to provide a mechanism for overcoming the divergence of strategically indifferent decisions or preferences." For him, the strategic decisions, in a changing economy, concern the balancing of production changes, in producers' or capital goods and services and in consumer goods and services, with the money flows to each of the circuits. Lonergan concluded that there would have to be new understanding of the self-interest that guides exchanges in order to avoid crises.[31]

Lonergan saw that exchanges depend on how the channels of production are flowing. More specifically, Lonergan argues that an analysis of economic evolution reveals "a mechanism distinct though not separable from the price mechanism, which spontaneously coordinates a vast and ever shifting manifold of otherwise independent choices from demand and of decisions from supply. It is distinct from the price mechanism, for it determines the channels within which the price mechanism works . . . The channels of circulation replace the overall dominance claimed for general equilibrium theory." [32]

In analyzing a market in which production techniques, income, and taste are fixed, the key variable would be price. But in analyzing an evolving economy in which production and incomes change, information about those variables would also be important. For Lonergan, the significant variables are the changes in the rate of production of producers' goods, changes in the rate of production of consumers' goods, and changes in money and credit in each kind of production. Prices remain important, he said, as they measure changes in payments.

Just as Marx, Hayek, and Schumpeter had done, Lonergan distinguished two sorts of production. He based his hypothesis on the fact that the production of consumable goods and services depends on the presence of such means of production as tools, trained people, some market development, and transport. Thus Lonergan suggests that the evolution of an economy depends on two elements: the innovating activities of entrepreneurs to create more productive as well as more capital goods and services; and the creation of the new financial means required. Together they make possible economic development and growth.[33] Unlike Schumpeter and Hayek who focused on the likelihood of a credit crisis, Lonergan emphasized the normal evolution of an innovating and growing economy with increasing productivity. The development process will come up for discussion again in chapter six, *Products that Make the Economy Grow,* and chapter seven, *Incomes and Prices in Economic Growth.*

Economic Thought After World War II

Since the mid-twentieth century, statistics and mathematics have become more and more important in economic analysis. This trend began with American economists, such as Simon Kuznets and Wesley Mitchell, who actively collected and analyzed data on the U.S. national economy from the 1920s and '30s. After the war, this new emphasis on economic data and econometrics would help to provide a basis for U.S. government policies. Government economists in other industrialized countries followed similar policies. At the time, governments' policies were increasingly being based on the ideas of the English economist John Maynard Keynes.[34] These policies gave governments or agencies such as the central bank control of the money supply and served as a guide to public spending. These tools were supposed to stabilize the economy, and they appeared to work well.

Economists' interest in periodic crises or business cycles waned after World War II. This was understandable: the first decades after the war were marked by a long economic expansion as Europe retooled its industries. Economists turned their attention to understanding economic growth. They also sought to understand the developments in international trade and finance, especially after 1973 when the exchange rates for currencies began to be settled by supply and demand in financial markets and were no longer based on a gold standard with the United States as the world banker. The economic theory used for most postwar studies of the real economy was *general equilibrium analysis*. However, economists working to understand the development difficulties in poor countries of the world also used Marxian political economy.

During the approach of World War II, as well as later on, many European economists moved to the United States. Schumpeter went to Harvard, where he was valued as a great teacher and where his major work *The History of Economic Analysis* was published in 1954, following his death in 1951 at the age of 68. At the time, his theories of evolutionary dynamics did not fit into the mainstream Keynesian policies and general market equilibrium theories that most economists favoured. As for Hayek, he went to the University of Chicago, where his ideas on microeconomic theory and production, the history of ideas, and the role of free enterprise in promoting economic growth helped in understanding the unexpected combination of inflation and unemployment that economies suffered during the 1970s and '80s. Indeed, Hayek is regarded as a champion of liberalism and free-enterprise economics. The economic ideas of both Schumpeter and Hayek were to draw economists' attention back to the role of supply analysis as a way of understanding the processes of economic change and growth over time. Hayek received the Nobel Prize for Economics in 1978. Schumpeter's ideas have become increasingly influential among economists.

Lonergan, whose work on economic dynamics was attracting scant interest after World War II, put his economic essays aside and, in 1957, published his major philosophical work *Insight: a Study of Human Understanding,* before going to Rome to teach systematic theology at the Gregorian University. After publishing his book on *Method in Theology* in 1972, he returned to his work on economics, encouraged by the renewed interest of economists in development dynamics and growth. Lonergan had read Kaldor's critique of general equilibrium theory as well as Kalecki's dynamic theory, which echoed his own ideas.[35] After accepting a position at Boston College, Lonergan began to work on revising his 1944 economics essay. Each year from 1978 to 1983, he conducted a graduate seminar on his economic ideas in the philosophy department there. However, illness forced him to return to Canada in 1983, where he died the following year. The economics papers were published in 1998 and 1999 as part of Lonergan's collected works.[36]

As we have seen, the classic analysis of the equilibrium of a multi-market economy of labour, goods, and services, was the work of the French economist Walras at the end of the nineteenth century. The American economist Kenneth Arrow and the French economist Gerard Debreu were to refine Walras' work a half-century later, for which Arrow shared the Nobel Prize with the British economist John Hicks in 1972. Debreu received the same award in 1983. Their work proved mathematically that Walras' notion of general equilibrium in markets can exist, is a unique equilibrium, and would be stable. But the fact remained that if certain variables were not included in the market adjustment, the analysis would not fit an evolving economy as it is experienced historically.

After the economic difficulties of the oil price increases of the 1970s and the cost of the Vietnam War led to simultaneous inflation and unemployment, Keynesian demand management policies to restart the economy seemed ineffective. Some economists turned their attention to understanding supply, productivity change, and growth in order to seek new policy approaches. An important paper on these topics, *Time to Build and Aggregate Fluctuations,* was to report the ongoing research on economic growth dynamics of two American economists: Finn Kydland and Edward Prescott. These two economists asked the following questions: How does production change and grow? Is there a *time-to-build lag* before consumer goods can be produced? Is money important in those changes? And has the government a role to play in helping the economy adjust to the changes? Kydland and Prescott based their analysis on the assumptions that people, as economic agents, will act according to current and expected prices and current and expected government policies. These assumptions are called *rational expectations.* [37]

In their model of economic growth and fluctuations, their idea—in line with the Austrian tradition—was that changes in production and output per person (productivity) result from new technologies. Such changes in productivity occur in waves and so could explain economic cycles as well as economic growth. They assumed that it takes time for investment to result in productive capital, so they included a *time to build*. Their model describes how entrepreneurial activity or a positive technology shock will lead to the hiring of more labour. The dynamic mechanism in their model was a single technology shock that is felt in the economy over successive periods.

Paul Romer is another economist who advanced our understanding of development and growth in a way that also helps to explain the differences in development across countries. His economic model highlighted the fact that knowledge is always being added to by research, and it is available for anyone's use, apart from patents that can often be interpreted narrowly. What limits the use of knowledge is people's ability to understand it. They may lack education or skills—what economists call *human capital.*

Romer's model emphasized the role of the entrepreneur who uses the available knowledge to create, through research and development, "a new design" that will give him or her an advantage in production as well as extraordinary profit.[38] The advantage is temporary, eventually disappearing when some other entrepreneur creates a better design in the same way. For Romer, knowledge is added to when entrepreneurs create new designs, and he argues that too little human capital is devoted to research. Romer also distinguishes two stages of production: producer goods or producer durables and consumer or final goods.

Romer's approach differs from that of Kydland and Prescott. For them development and growth depend on a technology shock that creates change in the economy. For Romer development and growth depends on the use of knowledge in research and development by educated people to produce better goods and services for profit, even though their advantage will be temporary. Both approaches address the issues of innovation and the variability of profit that were raised by the Austrian economists and Lonergan. However, unlike Lonergan, Keynes, Hayek, and Schumpeter, these investigators do not formally consider the role of money and credit that may not be neutral. Clearly, there is still no consensus among economists as to how the introduction of new money and credit in economic growth affects the process, or how important unemployment is in the growth process.

Summary

To clarify the discussion of production in chapter two, this chapter presents an historical overview of production in economic thought as it has been explored and explained by economists. First, the beginnings of economic thought in moral philosophy were noted. Economic thought, itself, developed in response to questions about production and finance, and how the income from production might be shared. These questions developed out of the turmoil and new wealth created by the Industrial Revolutions of the nineteenth and twentieth centuries. Still, much of economic theory continued to focus on exploring market equilibrium, and the effects of price changes on market supply and demand. This approach made price, rather than production and distribution, the central variable in economics. Since the 1970s, economists have once more taken a lively interest in production changes during economic development and growth. While economic thought on production and growth tends to be controversial, with economists taking policy positions on the political left and right, this chapter has emphasized the ongoing development of theory and the links among some of the key ideas. The next two chapters will look more closely at financing production. We approach this area by considering *What is Money?* and *Money in Economic Thought.*

The relative value of (money) is its usefulness. It makes possible the vast expansion of the exchange process which barter could not effect . . .

When the economic process has not expanded beyond the barter stage, the economic value (of money) would be zero. On the other hand, once the process has expanded beyond the barter stage, it is only by liquidating civilization that one can return to barter; in consequence, (money) becomes a necessity, and its economic value is the general form of all economic values; for, inasmuch as men strive for any economic end, they strive for (money) which is the means to the end.

Finally, exchange value is the ratio or proportion in which are exchanged the different categories of objects for which men strive because they are useful and scarce. Thus, if a horse is worth a team of oxen, then a team of oxen is worth a horse; and similarly, if a pair of gloves is worth a dollar, then a dollar is worth a pair of gloves. However, if a horse comes to be worth three oxen or a pair of gloves a dollar and a half, the question arises, has the value of horses risen or the value of oxen dropped? Has the value of gloves risen or the value of dollars dropped? To answer this question it is necessary to examine other exchange ratios. If it is found that while the price of gloves rose, the price of everything else remained pretty much the same, then it is the gloves and not the dollars that have changed in value. On the other hand, if the rise in the price of gloves was accompanied by a proportionate rise in the price of everything else, then it was not everything else but only the dollars that changed in value.

– BERNARD LONERGAN

Chapter Four

WHAT IS MONEY?

Kinds of Money

Money can take many forms. We usually think of it as cash in coins and paper issued by the state through the government's mint. And we have the government's guarantee that we can use the paper and coins to buy our goods and services. Historically, shells and playing cards have been used as money, especially in isolated societies where coins and paper money are in short supply. But some people are now saying that we are reaching the end of *the cash era*. And indeed our habits are changing. Paper money and coins are used less and less. People pay by cheque if they have a bank account, but more and more they pay their bills through automatic or online deductions from their bank account. And people often buy goods and services with a credit card or a bank card, instead of cash. We can keep track of our spending and receipts with bank statements or credit card statements.

What is credit money? Credit money is created by bank loans to businesses and individuals. Bank loans create money in chequing accounts and on credit cards; these are used like cash to buy goods and services. Such bank loans and credit cards are called financial services. We buy them by paying fees and interest. Eventually borrowers must repay the capital—the amount of the loan or the balance on the credit card. Similarly, when we put our money into the bank, we receive interest as payment for the use of our money. When bank loans exist, they become part of the supply of money. Most old loans eventually get paid off, but they are more or less replaced by the new loans being created. In effect, as the country and economy grow, the number of loans and the quantity of money grow as well. Because the economy is constantly changing, it is hard to know exactly how much money is circulating at any one moment. This can become a problem if the money supply does not more or less match what is happening in an economy's production of goods and services. Too little money squeezes production as prices fall. Too much money leads to price increases or inflation, as people try to use the new money to buy the goods available.

From time to time, people talk about doing away with money and returning to a barter system in which people simply exchange goods and services directly. Some barter happens in every economy, usually as an exchange of services. For example, if you repair my house, I will repair your teeth. As well, volunteers provide services without payment and seem happy to contribute to their community and have a chance to meet other people. Barter avoids income taxes as well as consumption taxes on purchases of goods and services. But the inconvenience of barter generally limits the full extent of its use. A full barter system can only exist in a small, relatively simple economy in which large tasks are managed cooperatively and each household produces what it needs to survive.

Uses of Money

As economic science tells us, money's purpose is first of all to be *a medium of exchange*. Exchange is necessary in complex economies in which people specialize their production activities for the sake of efficiency and productivity. Simply put, people receive money income for their production services and use that money to buy goods and services, spending it as they choose. Other producers such as small farmers, weavers, or craft people directly sell what they produce in a market. Visiting such markets gives us a good idea of how people produce, exchange, and consume in a market economy with money.

Economics also tells us that money can be considered as *a unit of account*. Money helps people to keep account of their earnings, or to keep account of the production and sale of goods and services in a company or a country. However, money can change in value over time. Such change in value makes it harder to know whether a price changed because of real changes in demand or supply for some product, or whether the price changed because of a change in the supply of money. This fogginess adds to the problem of matching the quantity of money with the goods and services produced, particularly when production grows and changes. So governments have learned to distinguish between these two sorts of price change by tracking changes in the consumer price index, as well as in other price indexes. When broad price indexes rise too quickly, the central bank can take measures to limit increases in the money supply.

When such corrections are sufficient, money can also be used as *a store of value*. Thus we hold money for a rainy day, for our old age, or for our children. Money is easy to store. But if we put cash into a mattress, we must believe that it will not lose its value. Of course, we can always deposit our savings in a bank that will pay us interest in exchange for its use. The interest will provide us with income and may help us to maintain the value of our money, especially if the rate of interest we receive at least matches the rise in prices. Nowadays, prices are rising between two and three percent a year in Canada. The bank can pay us interest because it charges a higher interest to borrowers such as business people, or to individuals who need a mortgage to buy a house, or who need a bank loan to avoid bankruptcy when their credit card debt has ballooned. Banks make some of their money by producing these financial services.

Banks

Nowadays banks have joined forces with investment brokers and insurance companies, thus merging people's savings in different institutions to better manage the provision of financial services. Banks also issue credit cards. So through the financial services that these institutions offer, we can borrow money or save it directly with the banks. We can also lend our savings to companies through the stock and bond markets, usually with the help of mutual funds managers or investment brokers. And many of us pay premiums to insurance companies to reduce our risk of personal or property loss. Because banks are so central to a market economy that uses money, governments regulate them to ensure that they can pay their depositors and that the national and international payment systems are working.

Banks have nevertheless been criticized because of the social power they have. It is often the bank that decides which companies will be given credit. Because it is less risky and easier to lend to large and well-known corporations, entrepreneurs with new ideas may have difficulty obtaining the credit they need. New production ideas may be delayed or even lost. Because of the power of banks, some societies develop alternatives such as cooperative banks to make small loans. Also, governments may support special business development banks.

A Central Bank

A country's money and banking system is regulated by a central bank. The central bank, which is more or less independent of the government, uses its discretionary power to keep the growth in money and credit as close as possible to growth in the real economy's production of goods and services. If the central bank fails to increase the money supply as it is needed, the economy will not do well. That is, the growing economic output will be sold for the unchanged money supply, and sales will be at a lower price. The price falls because the total of goods and services everyone brings to market has increased, while the amount of money has not. Such falling prices discourage business people, who will tend to cut back on future production and reduce the number of people working for them. This cascade of events can start an economic decline that may be difficult to stop. Much depends on the central bank's ability to keep the money growth in line with real production growth.

If, on the other hand, the central bank allows the money supply to grow too much, prices will rise too high and too quickly. Then people can buy less with their incomes. When inflation gets out of hand, the high prices will cause hardship to people whose incomes may not be keeping up with prices. In effect, the currency will fall in value against goods and services but will also fall against the currencies of other countries. People may even decide to move their savings and capital to other countries' currencies.

Deciding how to keep the money growth in line with real production growth in an economy is not easy. When central banks see the inflation rate rising, they try to limit the growth of the money supply. They can use interest rates to control the volume of money and credit. When banks are "loaned up" (so that their loans are at a maximum in relation to their reserves), the central bank can lend banks additional reserves so they can increase their lending. To control the banks' use of added reserves the central bank simply raises the rediscount rate, which makes it unprofitable for banks to borrow further from the central bank. (Unless the banks can then raise their own interest rate to borrowers, they will lose money. And higher interest rates might discourage their borrowers.)

Central bankers in fifty-five countries of the world are members of the Bank for International Settlements (BIS). They meet at their international headquarters in Basel, Switzerland. Founded in 1930, the BIS helps to maintain stability in world banking and currencies. It does this by overseeing and coordinating the sufficiency of its members' capital in relation to the assets—such as property and shares whose value can vary—that a member central bank holds. The BIS also encourages its members to provide public information or otherwise be transparent in their reserve policies for making loans.

Although central banks generally manage the currency and credit of a country's economy, they may fail to do so; either the central banks themselves may lack experience in national and international money management, or the government may interfere. Moreover, many national governments are not willing to accept an independent central bank. Governments may want to keep political control over the money supply. Printing more money may help to finance excess spending when governments want to spend more than they take in tax revenues; for example, to ensure their re-election.

When governments do not keep within their budgets, they must either print money or borrow from people in their country or abroad. Borrowing will create a future cost in interest and capital repayments for their taxpayers. Printing money creates price inflation and disrupts the economy as inflation increases. Finally, people can lose faith in the currency's value and try to get rid of it. It is very hard to restore people's faith in a currency, and governments instead may have to choose a new currency to re-establish credibility. These subjects are further discussed in the chapter on *Governments in the Economy.*

Money in Economic Growth

As economies grow, money will ideally grow in step. Otherwise, how will the banks finance the new ideas and opportunities that people seek and create? In any economy, maintaining the tools and factories, roads and ports, schools and hospitals is paid for out of the savings, or profits, of current production. But people with new ideas that start businesses have no profits from current production. What can they do? They can get credit by mortgaging their houses or borrowing from family. However, they may fail and lose everything. Alternately, they can borrow from a bank if the bank knows them and trusts their project. But banks tend to avoid little-known entrepreneurs and their projects that require costly study and more risky decisions. Recently, entrepreneurs with new ideas have sometimes found investment funds in private capital markets. Private capital markets move large sums of money around the world, sums that are not controlled by central banks or governments.

In many poor countries where credit is only available at very high interest rates, it is now possible to start a small business by borrowing a small sum from a micro bank (to buy, for example, a sewing machine, or a market stall). It is hoped that micro banks will eventually grow to fund larger projects. And some industrialized countries create non-profit banking institutions, such as the Business Development Bank of Canada (BDC), to encourage production by new businesses. The BDC gives more than half of its loans to young entrepreneurs, and about a quarter of all its loans are made to businesses owned by women.[39]

Financing economic growth can be difficult. As we have seen, creating too little money and credit discourages real growth in production and job creation. So workers suffer. Nor will the stockholders benefit, as dividends and capital gains depend on economic growth. On the other hand, creating too much money and credit can lead to inflation and a rise in money interest rates. The inflation during the 1980s led to high interest rates to offset the drop in the value of money debts. In short, if inflation is serious and rising, investors, balancing the rising prices against borrowing at higher money interest rates, will be discouraged from borrowing to start new production.

Money in a World Economy

We live more and more in a world economy. Our production of goods and services is often geared to world markets, and payments are often exchanged in several different currencies. How, then, do international payment flows of different currencies affect the way governments and central banks manage their national currencies?

Apart from the European Union countries in the European Monetary Union that created the Euro, most countries create their own currencies. In international trade, gold used to be the standard against which the value of the different currencies was measured. But since 1973, a currency's price, often expressed in U.S. dollars, depends mainly on the its supply and demand in currency markets, and on people's expectations about its future supply, demand, and price.

Today, with so many different currencies, financial services are not yet integrated across the world. However, in response to the trend toward a world economy, the size of banks has grown, and they offer services in several countries by purchasing other banks or otherwise obtaining permission to operate. Banks do, indeed, make high profits and their service charges tend to increase. Part of the problem is that banks and other financial agencies are learning to operate in a global economy. Because banking systems differ across countries, the costs for international services are higher. Security is also an issue that raises costs for international financial services. So, although there has been cooperation across countries and banking institutions, their perception of international financial risks discourages banks from fully integrating their financial services for the time being. Moreover, in a world economy, the power of banks including the World Bank and Regional Development banks to determine who will receive loans becomes an even larger social issue.

Can we still expect money to be a reliable store of value when the value of money depends on the nation whose currency it is? In a global economy we have to think of the value of our currency in relation to other currencies. How, then, do people decide to buy or sell our currency? Many people across the world have wanted U.S. dollars because they trusted U.S. dollars as a store of value; moreover, the United States continues to be a large market for their country's products. But, over the past few years, the value of the U.S. dollar has fallen against the Canadian dollar and other currencies. For instance, it fell 20 percent against the Euro between 2002 and 2005. Of course, these data also tell us about changes in the Canadian dollar and the Euro, as well as changes in the U.S. dollar itself.

Furthermore, as the Canadian economist Robert Mundell had already noted in the 1960s (when exchange rates were linked to gold), large private capital funds regularly move around the world, taking advantage of opportunities to buy undervalued currencies and to sell overvalued ones in the hope of profit. This pool of floating private capital is large relative to the monetary reserves of smaller countries. It enabled speculators, like George Soros, to make their fortune by selling a currency—in Soros' case, the British pound—when it looked weak or overvalued. When speculators were successful, a government was often forced to reduce its currency's exchange rate against gold and other currencies.[40] Today, a currency's value is no longer linked to gold but depends, instead, on its rate of exchange in money markets. There, speculators buy and sell currencies according to their demand for them and according to their expectations about a currency's future price. Clearly, speculators will win when the currencies they hold increase in value against other currencies. When their actions are transparent, speculators may help to stabilize financial markets.

In a world economy, international financial flows are large. Our world economy is run by independent sovereign nations, each worrying about its own wealth, power, and economic security. Although various nations have acted together to build the United Nations and its subsidiary international organizations—the International Monetary Fund (IMF) and the World Bank (WB), to name but two—these institutions often reflect the wishes of the major powers who tend to act in their own interests.[41]

Money and International Organizations

We have already discussed the Bank for International Settlements. While the BIS was intended to provide "a well-designed financial safety net, supported by strong prudential regulation and supervision, effective laws that are enforced, and sound accounting and disclosure regimes," it has not been given the power by its members or others to regulate such developments as offshore financial centres, new riskier financial institutions, deposit insurance, money laundering, and accounting scandals.[42]

The IMF, which is a U.N. organization, is one of the international financial institutions founded at the Bretton Woods meetings in 1944.[43] It is now managed by an executive board of twenty-four directors that includes the World War II allies (the U.S.A., U.K, France, and Russia), Germany, Japan, Saudi Arabia, and China. The remaining sixteen members represent various geographical groups of countries. The voting power of directors depends on their countries' voting power in the fund, which depends, in turn, on a country's quota or the amount of money the country deposits in the fund as it becomes a member.

Quotas depend on the size of the member country's economy and the importance of its trade. Quotas are paid into the fund by member countries in Special Drawing Rights or the world's major currencies (25%), with the balance being in each country's own currency. Because quotas determine a country's voting power in the IMF, the United States presently holds 17 percent of the voting power. The smallest country has 0.01 percent of the voting power.

The IMF can, then, use the quotas to lend money to countries that need help with settling their international payments. These payments include payments for goods and services, interest on loans, profits, and other money transfers between countries. The IMF can act to constrain smaller countries whose payments are not in balance by not allowing them to borrow beyond their quota. However, the IMF rarely interferes with larger member countries.

Every five years, the IMF reviews the countries' quotas, so that they will grow with the world economy. In general, each review has raised world quotas between 35 and 50 percent, reflecting in part the increase in international trade. The fund can and does provide countries with extra funds through so-called standby credits, extended arrangements, and other policies put in place to meet international changes and crises. For example, the IMF made special arrangements to create new money and credit for the newly minted countries of the former Soviet Union as they entered the world economy.

The fund has also had a role in stabilizing major international financial disturbances, such as the oil price shocks of the 1970s. Still, to stabilize world finance it was necessary to set up the Plaza Agreement in 1985 among the United States, Japan, France, Germany, and Britain to promote further depreciation in the U.S. dollar.[44] The IMF's role in the Asian crisis of 1997 and its use of structural adjustment programs in developing countries have also been widely criticized. And the IMF's management of financial crises through special arrangements has involved huge increases in the world money supply.

The IMF also chooses the interest rate earned on reserves borrowed from the fund. The rate varies with the cost of borrowing short-term money in financial markets. To this rate is added a service charge and a commitment charge that is refundable when the loan is repaid. However, the IMF charges minimal rates in special cases of poverty, world price shocks (e.g. oil), or natural disasters. Just as rising interest rates restrict a domestic bank in borrowing extra reserves from its central bank, a member country's demand for more money reserves from the IMF is restricted by the fund's interest rates. However, once a member's borrowing is approved, the money is deposited into a bank in the country in whose currency the loan has been made. There, it becomes part of the borrowing country's international reserves. These provisions of money are not international loans for projects, but credit provided to balance movements of money for various international payments.

The IMF has had to adapt to the evolving international economy, while maintaining some balance in international financial flows. Among the issues it continues to face is the power structure of the board of directors in relation to the changing powers of member nations; the role of the U.S. dollar as the most important unit of international accounts at present; and the continuing requirement to judge the supply of world reserves needed as the production of national economies grows.

The IMF also acts to stabilize exchange rates between currencies. As we will discuss further in the next chapter, currency exchange rates, since the 1970s, have been allowed to float so that they can be set by the supply and demand for various currencies in world money markets. National governments can manage their exchange rate by linking it to other currencies, as European countries did when they created the Euro. A country's central bank can also manage its exchange rate (or price of its currency) by raising interest rates to increase demand for their currency in money markets. But, as high interest rates discourage business prospects, this is only done in an emergency. If people do not trust a currency's value, because a government's debts are getting out of hand, they will sell the currency and the exchange rate will fall. Some countries peg their currency to a basket of currencies like the IMF's Special Drawing Rights (SDR) or a single currency such as the U.S. dollar. National governments can also partially manage their currency's price by matching their government spending with their tax revenues, and by choosing policies that tend to reduce spending on imported goods and services, so that their international payments (trade and financial flows) will tend toward balance.

Summary

This chapter began by exploring the different kinds of money we use in buying and selling, in paying our bills, and in saving for our future. We considered how banks started by holding people's money and lending it to businesses or other people. Today, banks also sell credit cards, stocks and bonds, mortgages, and insurance. We then discussed how central banks aim to match the quantity of money in an economy with the growing production of real goods and services by keeping an eye on the price inflation. Finally, we considered national currencies in a world economy and how relations between these currencies is regulated and influenced by international financial organizations, as well as by private financial flows. The international economy will be discussed in more detail in the chapter *Foreign Products and Money.* The next chapter on *Money in Economic Thought* looks at how economists and other thinkers have learned to understand and explain the role of money in the economy.

As to the fact of aggregate increments in the quantity of money in the circuits, there should seem to be no doubt. The whole history of the development of money points to that conclusion. Mercantilism is among the earliest of the products of economic thinking; it arose when inquiries into the prosperity of some and the poverty of other principalities and republics of the early Italian Renaissance led to the conclusion that prosperity depended on an abundance of gold; for centuries nations endeavoured to buy abroad less than they sold that they might have a favourable balance of payments. Further, by the time mercantilism became discredited, other means had been found to provide the circuits with greater quantities of money. Idle money had been decried. Laws against interest and usury had been attacked successfully. Bills of exchange and discounting houses flourished. Banking developed. There followed the fundamental increase in means of payment by the introduction of a gold standard and fiduciary issue. And in our own day we have witnessed the elimination of gold, even as a constitutional monarch, and the substitution of managed money, that is, a money managed according to the requirements of industry and commerce and not according to rules of thumb and a gold reserve . . .

Money is an instrument invented to fulfill a definite task; it is not the ultimate master of the situation. One has to place first human society, which is served by the economic process, and second the economic process, which is to be served by money. Accordingly, money has to conform to the objective exigencies of the economic process, and not vice versa.

– Bernard Lonergan

Chapter Five

MONEY IN ECONOMIC THOUGHT

Ideas on Stable Money

Money, as we have seen, existed in various forms in all societies where money tokens could relieve the burden of moving certain goods about to exchange for other goods. In the Medieval West, trade began to spread over greater distances, and important fairs were held at diverse times of the year in various centres where accounts could be settled among merchants and bankers. As production expanded in the European economy, more money was needed. Goldsmiths and bankers developed ways of extending the money supply that was based on gold. For instance, they evolved paper substitutes that could be exchanged for gold. Gold was trusted as a medium of exchange because it could be weighed, and its supply was limited.

People could see that prices would sometimes rise and at other times prices would fall. Why did these variations occur? Sometimes, of course, goods were scarce or a merchant created a scarcity by controlling the supply of a good to raise its price. But sometimes the value of money changed because the king or his ministers were debasing the country's coinage by "clipping the coins" and making more coins with the same amount of gold. If people found that the coin contained less gold than it should and so weighed less, they would pass the coin on as quickly as possible. Of course, the more valuable coins would be kept. Queen Elizabeth I of England's financial expert, Lord Gresham, is remembered today for realizing that "bad money drives out good," a principle enshrined by economists as Gresham's Law.

Mercantilism, another important idea about money, was popularized in the seventeenth century during the rise of such nation states as England and Holland. *Mercantilism* was the idea that a country could increase its wealth and also its money supply by accepting gold from other countries in payment for goods, when the country sells more than it buys from them. The mercantilist idea answered the need for new money and credit as nations sought power through economic control and growth.

The English philosopher David Hume criticized the mercantilist policy advice because he realized that increasing the money supply of a country, if production were not changing, might merely raise prices. Then prices of a country's exports would also rise, so that fewer would be sold. When export sales decreased at higher prices, the export surplus that created the flow of money into the country would simply disappear.[45] Hume's explanation of the relationship between the amount of money, the amount of real production of goods and services, and the prices in an economy became known as *the quantity theory of money*. However, classical economists, such as Adam Smith, contended that real production in the economy was what mattered. For them, money was *neutral* and could be thought of as a *veil* over the real economy.

The *quantity theory of money* assumes that production, the money supply, and prices are related in a fixed way unless the economy is growing. In other words, with a given money supply and an unchanging production, people will spend all their money on consumer goods. Any business surplus will be saved and reinvested for future production, whether directly or through banks or other financial institutions. The quantity theory has a common statement as follows: money (M) multiplied by its "velocity" (V) equals the real output of goods and services in the economy (Q) multiplied by the overall price level (P).[46] The quantity theory remains important today as a way of understanding the relation between the prices of goods and services and the money needed to pay for them, when those variables do not change.

Ideas on Money in Economic Growth

In periods of economic growth, as we have seen, businesses need more money. But how do the changes in money and production fit together as they both grow? Economists have continued to hold different views as to how new money can best be added to an economy and how we know when that influx is needed. Hume and the classical economists did not even ask these questions.[47] However, during the nineteenth century, as real economic growth progressed, serious financial bubbles and crises appeared, and questions about how to add new money to the economy became increasingly important.

Marx had a commodity theory of money that linked money value to his labour theory of value.[48] What mattered to him was the amount of labour needed to produce the good used as money. Thus Marx based his theory of the value of money on the labour value of gold production. He saw that paper money was directly linked to gold and that, as Hume had said, any excess of paper money would raise the general price level. But Marx' theory of money was also directly linked to production. In his analysis of "accumulation" or the growth through investment in a capitalist economy, he understood that new money is part of the process of production's evolution. What happened to prices depended not only on the money supply but also on the production phase, and on profits. For Marx, the quantity theory of money would not apply when production changes.[49]

Friedrich Hayek, who responded to Marx in his writings, links the flows of consumer and producer goods to money. He contended that goods are sold for money, which then returns to the various people who made the production possible. When the economy is evolving in a balanced way, the proportion of money going to the making of producer goods and consumer goods will depend on the structure and phases of the productive process as a whole. But for Hayek, balance in the economy would "depend entirely upon whether entrepreneurs find it profitable to re-invest the usual proportion of the return from the sale of the product of their respective stages of production" or a larger or smaller proportion. For Hayek, what an entrepreneur chooses to do mainly depends on "the magnitude of the profits he hopes to derive . . ." What entrepreneurs receive from their sales "is always composed of net income which he may use for consumption without disturbing the existing method of production, and of parts which he must continuously re-invest."[50] Hayek understood that in an expansion higher prices for consumers could create *forced saving* through a rise in producers' profits on the goods sold, which would help the expansion to continue.[51]

To deal with crises in economic evolution, Hayek insisted on balanced government expenditures and an unchanging relation between money and credit and real economic production. He thought that changes in production could occur through people saving an increased proportion of their income. Hayek worried more about financial stability than about falling prices that would then discourage businesses. He did not think that bankers would be able to manage changes in the money supply. As we have already seen, Schumpeter took a different position. He insisted on the need for new money and credit to allow entrepreneurs to introduce innovations into production.[52]

Knut Wicksell, a Swedish economist writing at the beginning of the twentieth century, proposed the notion of the *natural rate of interest*. Wicksell understood that new ideas for production made it possible for business people to expect higher profits. When that happened, the cost of borrowing money to invest in the new ideas, or the *money rate of interest*, would be less than the *natural rate of interest* or the profit that business people now expect. This difference between cost and return is the money side of the new ideas that led to changes in production and economic growth.[53]

Alfred Marshall, a mentor of Keynes at Cambridge, developed the notion of *cash balances*, or the money that the community holds but does not spend. Keynes, unlike the quantity theory economists, further developed Marshall's notion suggesting that *all* money might not be spent on consumption and investment. For example, if interest rates were low, people might just wait to invest their money until interest rates rose higher. So as people's demand to hold cash money increased, the supply of money for production would become more limited.

Keynes also thought that both governments and central banking authorities could help to balance the supply of money with the production of goods and services. Governments could use their fiscal (or tax-and-spend) policy, while central banks managed monetary or credit policy. Such actions, he believed, could adjust the supply of money and credit by replacing the funds being withheld in cash balances. To Keynes, government spending could end a recession and move the economy back toward full employment. A monetary policy of low interest rates, he believed, also encourages business to invest during a recession. Keynes' policies appeared to be a good solution in the long and deep depression of the 1930s, and they seemed to work well during the 1950s and '60s. Later experience showed that it was not easy to find the right interest rates, or to time government spending. Clearly, economic data takes time to collect and is sometimes hard to measure. During the economic changes of the 1970s, Keynesian policies seemed unable to increase production and employment and to control price increases.

To reiterate, a good deal of economic thought during the first half of the twentieth century focused on how to adapt economic theory so as to take into account the swings of expansion and decline associated with development and growth. And the issue of how money and credit were related to the real economy of production of goods and services remained central.

Wicksell and Hayek stressed the importance of a stable money supply and tended to stay close to the equilibrium analysis of an unchanging economy. They acknowledged that prices rise in an economic expansion as money and credit are extended. Wicksell introduced the notion of profit in a general economic expansion, by distinguishing the *natural rate of interest* from the money rate of interest.[54] Schumpeter, however, put more emphasis on the dynamics of changing production. Although he thought it was unlikely, he noted that a crisis could be avoided if the business people and banks did not withdraw their credit as the economic growth and development phase came to an end. On the other hand, Keynes proposed remedying a crisis by having governments stabilize the economy through spending and by central banks lowering their interest rates. Such actions, he said, could help to reverse the decline in overall spending and investment.

Bernard Lonergan built on the ideas of these economists in his general theory of how the relations between production and money work in an evolving economy. He saw the desirability of a managed currency that would accommodate changes in the production of goods and services, or the real economy. He rejected the gold standard, because it made the amount of paper money fit gold production rather than the needs of the real economy. Lonergan also saw the negative effects of the mercantilist policy of acquiring gold in payment from other countries in payment for exports in excess of imports. He contended that when the world's money system was based on gold, it would reduce the potential money supply in the other countries and simply "rob Peter to pay Paul."

Writing in the 1940s, Lonergan argued that, ideally, new money goes to producers first, reaching incomes and consumption via the increases in employment created by those producers and entrepreneurs. He saw that money velocity, or the speed with which money moves in its circulation, sometimes increases. In other words, more payments for production would be done during a yearly or monthly period. But faster money circulation usually happens once an economic expansion is underway. That means the quantity of money and credit must grow as well, as Schumpeter understood.

Lonergan also drew attention to the need to understand the difference between a relative price rise and a general rise in prices. Whereas a *relative price rise* would stimulate production of the good or service concerned, a *general price rise* is merely inflationary and ought not to stimulate production. Of course, some inflation happens because of the increase in money and credit in an expansion. Lonergan argued that such inflation can be controlled if the higher profits are reinvested to ensure the full development of the expansion phase and the eventual growth in the output of consumer goods and services. Furthermore, once the production of consumer goods begins to grow, inflation will be controlled as scarcity is overcome.

Milton Friedman, an influential American economist, received the Nobel Prize in 1976 for his work on the links between price inflation and unemployment. Building on Wicksell's natural rate of interest, Friedman thought that there was a *natural rate of unemployment* that depended on technical factors in production as well as on the degree of monopoly in an industry. He argued that excess government spending, which would lead to inflation, could not reduce unemployment below its natural rate. Friedman thought that a government's monetary policies should aim for stability and avoid surprises. Monetary surprises raise money prices making it difficult for producers to decide whether the price of their product has risen relative to the prices of other goods.[55]

Recent economic research has also focused on determining the role of changes in money on economic growth. In their work on real economic expansion, Kydland and Prescott have not included the economic effects of money that inevitably must be added as the economy grows. In fact, they have retained the notion that money is a veil for the real economy. Certainly, economists hope that the money effects will be neutral in the economy. But can neutral money be ensured in economic growth? The conclusion seems to depend on the actions of people, their governments, the central banks, and international financial markets. Kydland and Prescott's research has shown, too, that government monetary policies that are planned well ahead and implemented consistently are more beneficial to citizens than those policies that the government changes more often. In other words, money surprises are not good for the economy. But money movements around the world by individuals, corporations, and financial institutions do create monetary surprises. Kydland and Prescott concluded that changes in the money supply or money shocks, although persistent, are not really important as the economy grows. However, other economists, including Hayek, Keynes, Schumpeter, and Lonergan, have argued that money supply increases can be important for production and employment in an evolving economy.

Ideas on International Finance

From the earliest times and in all cultures money has always been linked to international exchanges. David Ricardo, a classical economist of the eighteenth century, a financial advisor to the British government, and an important student of international trade and money, saw as Hume had that international money flows could affect the domestic economy. Ricardo explained how international trade tends toward balance between countries when the economic situation does not otherwise change. He recognized that excess exports bring new money into a country and finance its development. But if prices rise as a result, exports will not be as popular abroad, while people at home will continue to buy their usual imported goods. International trade and payments will slowly move back toward balance. On the other hand, if there are excess imports into a country, money will flow out to pay for them. People will buy fewer goods domestically and prices will fall. Exports will be encouraged again by the low prices. Again, trade will tend to move back into balance.

How do economists today analyze the relations between international trade and money? We live in an almost fully globalized economy, where many countries still use their own currency. An exception is the European Union countries belonging to the European Monetary Union, who now use the Euro. Robert Mundell, an economist of Canadian origin who studied international financial questions, clearly saw the importance of money—not only in economies but also in international relations. He tells us that the international monetary system before World War II was an informal tripartite agreement between the United States, England, and France about international payments, a system that already foreshadowed the postwar international financial institutions. Participants at the Bretton Woods meeting in 1944 did not accept the advice of British economist John Maynard Keynes and American economist Harold White to choose a world currency to replace gold. Keynes, in particular, thought that it was "barbaric" to base currencies on gold, arguing that the amount of gold depended on its discovery and mining and was too unreliable a basis for determining money and credit in a world economy.[56] In the end, the international monetary system was linked to gold, when the United States was willing to buy gold at $35 an ounce. That meant that the United States was the world's banker. Other currencies were tied to the U.S. dollar, and their monetary policies, in turn, were tied to the U.S. government's economic policies. But, as we have seen, governments sometimes ran budget deficits because of excess spending. The Vietnam War led to that kind of extraordinary spending. In that case, the value of the U.S. dollar fell with gold becoming cheap at $35 U.S. dollars an ounce. Other countries began selling their U.S. dollars to buy gold from the United States at the fixed price.

Mundell tells us that U.S. economists did not agree on how to advise the U.S. government agencies about what to do. The question was how to interpret the relationship between interest rates and the government budget balance, which were the tools of government policy at the time. Mundell, among others, argued that the correct policy mix was to lower taxes to spur investment and employment, while tightening monetary policy to protect the balance of payments. However, if the U.S. balance of payments deteriorated, gold would flow out of the country unless the United States raised the price at which gold was sold.

The IMF, through its board of directors decided to create Special Drawing Rights (SDRs) to ease nations' imbalances in payments for trade goods and finance. But this IMF policy proved insufficient, and President Nixon had to close the *gold window*. This meant that the United States no longer sold gold at $35 an ounce; instead, a U.S. dollar standard was created for world currencies. Countries then added U.S. dollars to their central bank's international reserves. Some fixed their currencies to the U.S. dollar. But the variations in the U.S. dollar made the fixed exchange-rate system unworkable and, by the spring of 1973, exchange rates between currencies were allowed to float in the money markets according to supply and demand, with some government interference to manage their exchange rates. In the same year, the oil price shocks led to worldwide inflation as the Eurodollar market expanded to finance the deficits of the oil-importing countries. Huge sums of money, largely in U.S. dollars, were paid by oil importers to oil exporters. The international monetary system was in dangerous waters.

In response to the international financial crisis of the 1970s, economists proposed that national governments keep prices stable by controlling the money supply, and also stimulate the real economy by reducing taxes and simplifying business regulations. Paul Volcker, who was chairman of the U.S. Federal Reserve, the U.S. central bank, initiated the tight monetary policies in the United States. Governments learned that it was important to balance budgets in the medium term, if not annually. Surprisingly, it was decided that a policy of cutting tax rates to stimulate the economy, in the hope that economic growth would raise tax revenues, could help governments to balance their budgets. These policies were put in place by most of the G8 countries.

With the introduction of the Euro, the international financial system became a world in which three international currencies were important: the U.S. dollar, the Euro, and the Japanese Yen. After 1990 the Yen became less important, but the Swiss franc and the pound sterling remained currencies in international use, reflecting in part the domestic conditions in those countries.

The international financial system has important remaining problems; the volatility of flexible exchange rates that are more or less determined by supply and demand is a major one. Volatile exchange rates can disrupt the economies of different countries, especially as they participate more and more in the global economy. Exchange rates between the main world currencies have been very volatile. Mundell suggested that a currency union among the major currencies could limit such variations. The Canadian economist Thomas Courchene recommends a North American currency union based on the U.S. dollar.[57] Such a union would resemble a fixed exchange-rate system, and countries that were part of it would have to have common price inflation and some sharing of the benefits of owning a world currency.[58] But no agreements on such policies have been reached. Mundell thought that an international financial system, with exchange rates determined in financial markets, would be subject to money shocks that could seriously disrupt national economies, not to mention the international financial system itself. Indeed, the Asian crisis in 1997 resulted from such a shock.

People around the world have been willing to hold onto U.S. dollars, given the U.S. dollar's status historically as a stable currency. The United States is still the world's largest market. The world's demand for U.S. currency allows the United States to supply more currency than it needs for itself. The importance of a currency in the international monetary system depends on a country's wealth and its international trade. And these, in turn, reflect the country's power in the world.[59]

The influence of both international account imbalances and government deficits are monetary issues that matter to national economies. And a crisis in one of the larger world economies can lead to a world financial crisis. Clearly, international financial coordination is important and has, in the past, depended largely on the leadership and interests of the United States. A world currency would reduce the volatility of the world's floating exchange-rate system and simplify international trade, payments, and travel. But adjusting to a world currency would restrict a national government's ability to stimulate its economy or defend its policy regime via government spending that creates a budget deficit. Indeed, many countries would find such restrictions hard to accept. Take, for example, the ongoing budget deficit issues in European Union countries that share the Euro.

Summary

This chapter has presented an overview of economists' efforts to understand and manage money flows both nationally and internationally. Economic theories, such as the quantity theory of money, have been built around a stable economy. In times of economic growth many economists still regard money as neutral, although some economists argue that the economy will be subject to money shocks or surprises. Lonergan called for an understanding of the varying money needs of the real production process during both the investment expansion and the production growth of consumer goods that the investment expansion makes possible. When these changing needs for money and credit are not met, economies can fail to grow or may even decline domestically and internationally.

The economics of money remains an open issue, partly because we live in a world economy that is still quite dominated by national states with their particular economic, financial and political interests, and partly because of unregulated international financial markets. The next two chapters, *Products that Make the Economy Grow* and *Incomes and Prices in Economic Growth*, explore the differences between producer or capital goods and consumer goods and examine why there is a lag in the growth of consumer goods and services. What do we need to know about innovation and growth so that the economic developments and new production they bring can benefit everyone?

In the first place, the process of transformation is a series of conditioned emergences. In making a coat of mail each new link has to be added to previous links, and similarly the successive stages of economic progress presuppose the previous stages and arise from them . . . Agriculture adds the ox and plough and the difficult idea of property to primitive gardening. To sustain agriculture a number of new crafts spring up; but the new crafts are themselves conditioned by the leisure which agriculture yields. An extension of the crafts will come only with large-scale commerce, nor can commerce at its centers, if not at the outposts, get along without the introduction of money. The new leisure created by the combination of agriculture, the mechanical arts, and commerce at once stimulates and makes possible the study of science; but science brings applied science, finance, and mass production to transform agriculture, trade, and the crafts and to unite men in an economic interdependence . . . Each stage in the long process is ushered in by a new idea that has to overcome the interests vested in old ideas, that has to seek realization through the risks of enterprise . . . To conclude: all the functions of the primary and secondary rhythms are integral to the universal process. That consists not merely in widening, in deepening for more widening, and both for more cheap pleasures and amusements. The cultural overhead and the deepening that releases man to leisure and culture are also essential parts . . . of economic transformation.

– BERNARD LONERGAN

Chapter Six

PRODUCTS THAT MAKE THE ECONOMY GROW

What are Producer Goods?

Of the goods and services produced in an economy, not all are for immediate consumption. Those that cannot be consumed are called *producer or capital goods* and include equipment, highways, trucks and cars for transport and deliveries, computers for accounting and communication, and education and training for employees or oneself. Once producer goods are produced, only their use is part of production. The production process takes time to extract raw materials, produce new equipment, research or develop new ideas, and train new people, before finally producing new goods or services for our standard of living. So the production of new consumer goods is lagged while various new means of production are put in place.

Economic history is full of examples of the production lag between growth in the volume of the producer goods, and growth of the consumer goods that they make possible. Building the railroads across North America did not directly increase consumption, but it did shift production of wheat to western Canada and then increased it. So building railroads both changed and increased production of consumer goods. The change in production made it necessary for wheat farmers in Ontario to move to Saskatchewan to produce wheat, or to change what their Ontario farms produced. These changes in production came first through the building of the railroad, which was a change in the production of capital goods.

Lonergan, among other economists such as Marx and Schumpeter, called capital goods *surplus goods*. They are *surplus* because they require a surplus to be set aside from the production of the things that we continually consume to survive, such as food and shelter. Of course, the surplus can simply be consumed. That will raise the standard of living of a few. Or the surplus can be invested to produce new or more capital goods and services. That will expand our output of consumer goods, and improve the standard of living of many people. Such innovative reinvestment of surplus or profit describes the economic history, or the economic basis of development, in the West since the ninth or tenth century of our Common Era.[60] And for the last century, economic development has been spreading around the world. In short, where they can, people create their tools, equipment, and skills, or apply the ideas used in other countries to their own situation. And when that does not work, people try to migrate to where opportunities are better.

As we saw in the last two chapters, entrepreneurs require new money and credit to undertake innovation and growth. Their business outlays, then, create incomes, much of which will be spent on consumer goods. New consumer spending, in turn, raises profits for producers because the output of consumer goods has not yet increased. When the higher profits are reinvested, producers can complete the innovation and growth they have initiated. When Lonergan discusses *channels of circulation* that underlie the price mechanism in markets, he is referring to the *lagged relations* in production of capital and consumer products. The lag in the production of new consumer goods is overcome as new production facilities, skilled people, and markets are put in place. Moreover, innovations in production often reduce the number of workers needed to supply a given standard of living. In other words, productivity or output per person increases. To benefit everyone, innovation needs to be accompanied by growth to provide new jobs and income. Otherwise, consumer demand may slacken if unemployment causes people's incomes to fall.

Thus, a successful transition in innovation and growth needs first of all new money and credit and sufficient investment. But added investment leads to diminishing returns or falling profits on each good sold. Understanding that the higher profits and prices of the investment expansion will disappear is difficult for those few who are enjoying the temporary advantages of higher incomes and profits. However, if the new investment is broadly extended in the economy, increased production will bring the higher standard of living to everyone employed or otherwise receiving income.

It is unclear why we do not pay more attention to the differences between the two kinds of production, their different proportionality to our standard of living, and the lag between getting capital goods and services in place before new and more consumer goods and services are ready for sale or use. After all, people's futures depend on timely preparations to satisfy their future needs. For example, as people begin to respond to climate change and sustainable development issues, there will be many changes that call for investment by corporations, governments, and individuals to develop and produce energy, materials, and industrial production that will be less based on coal and oil. Already, some corporations and individuals are demanding, from their governments, economic policies that will help all parties to reach a sustainable economic future for the world.

Historically, investment in capital goods production has occurred in waves that often begin in a single firm or industry, but tend to spread throughout the economy. Economists call these investment periods a *surplus phase*, an *investment boom*, or an *investment expansion phase*. Unfortunately an investment expansion phase can turn into a speculative bubble of excess investment, if the phase is not well understood, or if people's decisions are too narrowly self-interested.

When new ideas first lead to new investment, increasing returns or higher profits are the entrepreneur's reward. But as the production of capital goods is imitated and fully extended in an expansion, decreasing returns to investment inevitably follow. Strong firms can protect their higher profits from the consequences of decreasing returns by restricting production, while weaker firms with higher costs are more likely to suffer losses. Naturally, when the expansion of production is restricted in an effort to maintain profit levels, layoffs and unemployment may occur. If nothing is done to allow income distribution to adjust to decreasing returns, people who spend most of their income on consumption will be unable to maintain their demand for goods and services. Businesses may close, creating unemployment, and incomes and demand will fall further. The economy can then enter a downward spiral as occurred in the Great Depression of the 1930s.

Capital Goods in Economic Thought

Austrian and Swedish economists of the early half of the twentieth century were among the first to pay attention to issues raised by capital goods and production over time. Adolphe Lowe, an Austrian economist who inspired Hayek and Lonergan's views on development and growth, realized that there could be changes in the structure of production (how production is divided between producer and consumer goods) as an economy grows. Meanwhile, other economists were finding it difficult to fit changes in capital goods over time into the equilibrium theory of market supply and demand. For example, Dale Jorgensen, an American economist teaching at Harvard, worked on investment issues during the 1970s. He tried to include lags in the delivery of capital goods that entrepreneurs ordered to meet their needs. But Jorgensen's model could not be satisfactorily tested statistically using economic data.[61]

In the ongoing effort to understand producer goods in a changing economy, economists in England and the United States tried to come to an agreement on how to include capital goods in economic theory. The discussion was called *the capital controversy* and centred on the question of how to measure the cost of capital when the rate of interest changes over time. Despite the competing explanations for the role of capital in production, some economists came to view producer or capital goods as *goods in process.* One of these was the American economist, Irving Fisher, who posited that capital goods are used up in the production process. This approach sidestepped the problem of pricing capital over more than one production period. Nevertheless, economists generally assume that firms or corporations invest in the capital goods that they want as long as their returns or profits are above or equal to the interest rate. As we have already seen, the *interest rate* is the cost to entrepreneurs of borrowing funds from banks and financial markets.

Since the important economic upheavals of the 1970s and '80s, economists have returned to the study of how production time lags or *time to build* can be included in the economic analysis of growth and cycles. Perhaps the best known, because of the Nobel Prize they received in 2004, are Finn Kydland, and Edward Prescott.[62] Other economists such as Hayek, Schumpeter, and Paul Romer, to name some we discussed in chapter three on *Production in Economic Thought,* have also recognized the lags in production phases in their models or analysis. But they did not always link them formally to the changes in money and income flows that are required. They assume that monetary changes will match production changes, or money will be neutral in economic growth.

As we have seen, Lonergan also recognizes a lag in production and agrees that money can be assumed to be neutral in his pure cycle of innovative growth theory. However, he argues that, reaching potential growth, like driving a car, in fact, requires adaptive behaviour on the part of people in their economic activities.[63] To draw attention to the changes in economic behaviour that are needed, Lonergan emphasizes the distinction between production and the *circulation of income* in the growth phases. The expansion phase of the means of production demands increases in investment and savings from the higher profits that characterize it. The expansion phase turns, then, to the phase of growth that fully uses the new and existing means of production to provide products and services to maintain and raise people's standard of living. The full development of that phase is characterized by a return of profit income to normal levels, until a new expansion is underway.[64] As Lonergan put it: "First then, there is a wave-like structure that places the accelerated production of producer goods in advance of the consequent acceleration of the production of consumer goods."[65]

Lonergan's distinction between capital and consumer goods production is a functional one; the two kinds of production are not necessarily separated physically.[66] Both kinds of production may occur in a single firm. Still, it is possible within a company, an industry, or within the economy as a whole, to distinguish the share of production that pertains to capital goods and services and the share that pertains to consumer goods and services.

Clearly, producing new capital goods is intended to produce more and better consumer goods. However, as explained briefly in chapter three, once the expansion in capital goods production approaches its limit with decreasing returns, and the expansion of production for people's standard of living is well underway, there tends to be a decline in both output and employment in capital goods production. Falling incomes lead, in turn, to fewer sales of consumer goods, setting off a downward spiral in the economy.

How can such an outcome be avoided? Following the lead of such economists as Keynes and Schumpeter, Lonergan proposed that investment, income, and production could be maintained, as long as the production of both producer and consumer goods and services, broadly understood, develop to their full potential. As discussed in the epigraph at the beginning of the chapter, Lonergan understood the standard of living to include the leisure people need to permit them to develop both socially and as human beings. Moreover, Lonergan argues that if production of goods and leisure that serves people's standard of living grows enough, there would be sufficient demand for replacement capital goods and services. Investment spending may cease to grow, unless there is a new expansion, but it need not decline.

The dilemma is how to achieve such full development in a free economy that relies on individual initiatives within laws and regulations. In Lonergan's view, central and bureaucratic economic controls have not worked. His solution depends on *a better understanding among the general population of how the macroeconomy works*. Government policies in a democratic country depend on the understanding and choices of its citizens. What are the goods and services that people want? Where in a mixed economy of for-profit, nonprofit, or government producers can they be best provided? For Lonergan, when people actually understand the economic growth phases and realize how interdependent we all are economically, innovative growth transitions could benefit everyone.

During the nineteenth century, the maxims of "thrift and enterprise" encouraged people to invest in the industries that were needed. Lonergan suggests the maxim of "benevolence and enterprise" as a guide to ensuring the full development of a growing economy. As he explains, we need to understand that there are periods when the economic activities of people emphasize innovating, increasing the means of production, and infrastructure building (buildings and equipment, transport, financial and government services, and education and skill development). And those periods demand growth in net savings and investment. Similarly, there are times when it is necessary to make full use of the new producer goods to create, in various centres of production, the consumer goods and services that will benefit the standard of living of everyone.

According to Lonergan, if the producer goods share of output is growing faster than the share of consumer goods output, the economy is in an expansion that has the potential to vastly increase people's standard of living. For example, investment growth in pollution abatement could bring that type of expansion about. The choices demand foresight and generosity by individuals, groups, and government. But foresight may be lacking. Economists have drawn attention to the fact that people prefer consumption today, and they tend to discount the value of future benefits and ignore future costs.

If growth in the consumer products' share of production outpaces the producer goods' share, the economy is moving to the end of a particular expansion phase. It is then important for people to expect changes in income distribution as extraordinary profits subside, the goal being to optimize the production possibilities of the new capital goods and services to create a better standard of living. Such changes may well involve all production sectors: the private sector, the government and the nonprofit sector.

Capital Goods and Money

As we have seen, some economic theorists treat money as a *veil* in their analysis of real goods and services. Schumpeter, however, saw the importance of new money to make economic development possible. And Keynes drew attention to the need for government spending and low interest rates to bring an economy out of a depression. Lonergan extends Schumpeter's emphasis on the importance of new money in development. He contends that the phases of real production growth depend on the circulation of new money matching the new production of producer or consumer goods. He uses money or financial flows to show how the real production phases connect with the changes in incomes and spending that are needed to successfully complete a transition of innovative growth. But what are these changes or crossovers in spending? When economic development reaches the point of demanding new capital goods production, financial flows expand, first, the production of the producer goods. Financial flows shift later to the related consumer goods and services production. A simple example of the transition is given in Appendix One, Lonergan's Baseball Diamond diagram.

Lonergan explained the equilibrium, or norm, to be sought in a growing economy. The expansion of capital or surplus products requires more savings and investment from people's incomes. But the expansion of consumer or basic products requires less savings and investment in the aggregate and more consumer spending and leisure overall. Higher profits provide the savings needed to expand investment to produce new or more surplus or capital goods. But incomes that will be largely consumed are needed to expand the demand for consumer goods and services enough to maintain jobs and income. And when the larger economy produces at its potential, replacement investment will be sufficient to maintain investment demand. In other words, Lonergan argues that income distribution in the economy can be expected to vary with the measurable stages of aggregate growth in capital and consumer products. The next chapter, *Incomes and Prices in Economic Growth,* explores the changes in income distribution.

We live in a mixed economy in which our governments are economic actors. How then can governments organize their spending to best match the stages of growth that follow innovation? In the end, governments are constrained by their budgets. Over time, they must balance their spending with their revenue from taxes levied on their citizens. But governments do invest in education or capital infrastructure, and we expect our governments to foresee and implement the policies that create an environment for innovation and growth. Government spending on health care and education both invests in people and raises their standard of living. Governments can also encourage investment through tax incentives or regulations that may well initiate an economic expansion. Note that *Governments in the Economy* is the subject of chapter nine.

The nonprofit production sector is a growing part of many mixed economies. Increasingly their organizations can, with government and business, create new production centres that not only expand production but also better ensure people's participation in economic growth and development. People who work in the sector produce both capital goods (education, the arts, religions) and consumer goods (health, care, shelter). The sector's financial resources come from governments, international organizations, the for-profit sector, and philanthropy. The nonprofit sector's role in producing people's individual and social well-being is increasingly recognized.

Modern economies are closely connected to other countries in the world as well. Foreign sources of savings have been important for the development and growth of many economies. Moreover, foreign investment often supplements a country's low savings to provide funds for its economic development. An important caveat is whether a country's people and their businesses have enough say in choosing the direction of foreign investment. Readers may wish to consult the chapter on *Foreign Products and Money,* which explores these questions further.

Summary

This chapter has discussed the differences between the goods and services we consume—consumer goods—and those others—capital or producer goods—that we first produce and then use to enhance the production of consumer goods or create leisure. We saw that in the economic development that follows innovation there was a phase lag in the production of consumer goods. During the lag, the new requisite producer goods are built and put into operation. The chapter also discussed the role of money in initiating growth and the importance of balancing money flows to capital and consumer goods production as growth in the different kinds of products changes with the production lag. We also discussed the income or demand side that can ensure full production development. We noted that people and corporations with higher incomes and profits could provide the savings and investment to complete the capital building phase of production growth. We discussed the notion that much more egalitarian incomes will ensure sufficient demand for a fuller development of the production and sale of consumer goods and services. Finally, we saw that governments, the nonprofit sector, and the rest of the world can help or hinder these production processes. The next chapter turns to incomes and prices in growth and development.

In the old days, when the entrepreneur was also owner and manager, pure surplus income roughly coincided with what was termed "profits." Today with increasing specialization of function, pure surplus income is distributed in a variety of ways. It enters into very high salaries of general managers and topflight executives, into the combined fees of directors when together these reach a high figure, into the undistributed profits of industry, into the secret reserves of banks, into the accumulated royalties, rents, interest receipts, fees, or dividends of anyone who receives a higher income than he intends to spend at the basic final market . . . Thus pure surplus income may be identified best of all by calling it "net aggregate savings" and viewing them as functionally related to the rate of new fixed investment. . .

Previously I have suggested a lack of adaptation in the free economies to the requirements of the pure cycle. What that lack is can now be stated. It is an inability to distinguish between the significance of a relative and an absolute rise or fall of monetary prices . . . For the fall of prices may be general and absolute; as such it will result not from a change in demand but from a failure in the income distribution to adjust the rate of saving to the phase of the productive process; to allow such a general maladjustment to convert a basic expansion into a slump is to cut short the expansive cycle of the productive process because one has confused real and relative prices with monetary and absolute prices . . . This, I believe, is the fundamental lack of adaptation to the productive cycle that our economies have to overcome.

– BERNARD LONERGAN

Chapter Seven

INCOMES AND PRICES IN ECONOMIC GROWTH

Are Profits Part of Income?

For both economists and business people, *profits* constitute the surplus over costs of production. Profits can sometimes be small or even absent. In a poor country that has a subsistence economy, people must consume most of what they produce just to survive. There is little or no surplus to be saved and invested in growth. For example, during the early Middle Ages before the end of the first millennium, subsistence economies existed throughout much of Europe. In effect, after Rome fell to the invaders in the fourth century of the Common Era, the economy of the Western Roman Empire slowly declined. The continuing invasions, and the collapse of Roman law and order, led to local subsistence economies. The European economy only began to grow again during the ninth century.

An important source of the surplus needed to restart Europe's economic development was the European commerce in slaves with the Muslim caliphates across the Mediterranean Sea. The surplus created by slavery also made life more comfortable for the fortunate few in the ancient world of Greece and Rome. Later, Europeans took slaves in wars and in raids from the northern and eastern frontiers of Europe, herding them to the Mediterranean to be transported through Venice and other ports.[67] Slavery remained a source of economic surplus in the West until the late nineteenth century. In Europe and America, much of the surplus produced by slaves was saved and invested in economic development. We still suffer from the social effects of past slavery, while it continues to be a source of income even today in poor countries around the world.

With the beginnings of innovation in agriculture and waterpower during the twelfth century and later, the better organization of communities and the development of cities and towns made agriculture and commerce more productive. People could sell their farm surpluses in the local markets. Many other occupations such as weavers, builders, millers, bankers, etc. could be supported with the surplus food.[68]

Today, a *business surplus* can be thought of as the revenues from sales over and above the *costs of production*. The costs of production include the costs of materials and services (advertising, legal fees), wages, salaries of managers, interest on business loans, and dividends to shareholders who own the business. Almost all of these costs are negotiable to some extent. So the surplus, in fact, is defined by what the corporation or organization's annual report claims as a profit. That surplus can be reinvested to expand production. Of course, some of the surplus goes to the government in taxes to maintain and improve the public goods and services chosen by the citizens through the political process.

Profit, or the surplus over cost in production, is a major goal of entrepreneurs who start businesses. It is also a goal of employees, who may be rewarded with a raise or a bonus; of stockholders in a corporation, whose dividends and share values change with profits; and of union members, who expect higher wages and benefits. Do these different goals benefit or harm the economy as a whole? How can we tell?

Although profits are acknowledged in the microeconomics of individual firms or businesses, profits are not much discussed in macroeconomics, which studies the economy as a whole. In macroeconomics, production income is divided into depreciation costs paid to replace buildings and equipment; sales and income taxes paid to the governments that can be used in part to provide incomes for people who are not part of the productive process because of age, disabilities, or temporary unemployment; and other income paid to individuals for their present or past contributions to production such as wages, salaries, pensions, fees, or interest and dividend payments. As the epigraph at the beginning of the chapter states, Lonergan, too, noted the dispersion of profits into incomes. Moreover, corporations also retain profits for their investment or consumption spending. Clearly, the producers or the stakeholders in a business need to be rewarded for their efforts. But how is each share to be negotiated, especially as profits rise and fall? Note that because profits are distributed to governments, employees, and owners, as well as retained in a corporation, they can simply disappear into national income.

What are Costs?

Economic history tells us that people live not only to survive but also to improve their lives and the lives of those they care for. This recognized fundamental human drive is the basis for economic and cultural development. To achieve economic development, we may work harder with the tools we have to produce more. And with time, we have learned to build better tools, we have learned new skills, and we have found new markets for the goods we produce.

Economists discuss development in terms of producers' short-run and long-run costs of production.[69] In the short run, there are no changes in the means of production. But in the long run, new ideas can introduce new means of production that will operate at lower costs. When this happens, the new or *long-run production costs,* being lower than the former *short-run costs,* lead to increasing returns or higher profits for the producers.[70]

Costs also include *opportunity costs,* or the cost of not producing some alternative good or service. For example, choosing to work instead of continuing one's education creates a probable opportunity cost of limited future income. Public costs are another category; a country's tax and regulatory systems usually define the public costs that companies or consumers must pay, such as taxes on gasoline, or the cost of meeting regulations about health standards or listing the ingredients and food values on food packages.

Producers have been criticized for counting only the costs they must pay and not the whole cost of production, some of which may be borne by others in the society. Should producers bear all the costs related to their production? Doing so would either reduce profits and production, or raise prices for consumers. In fact, however, producers and consumers share the added costs through higher prices. But resistance to higher prices by producers and consumers may actually discourage governments from reducing the social costs. Take the case of pollutants, for which governments sometimes tax emissions or subsidize producers who reduce them.

We are familiar with the public's current interest in both reducing greenhouse gases and other pollutants in the environment through taxes and subsidies, introducing trading permits, and negotiating international treaties. International agreements are important; they can ensure that the inevitable costs and adjustments are shared as fairly as possible. Without such agreements, one country's producers and consumers might be asked to pay costs that competitors and consumers elsewhere do not have to pay. Clearly, when no action is taken to limit pollution in order to keep costs and prices low, any advantage in low cost goods or services that benefits consumers may well be offset by the costs to the community of cleaning up rivers, or dealing with climate change.

While long-run costs and benefits do matter, we often note that governments are only worried about the next election, that corporations are only worried about their next quarterly profit statement, or that consumers only want a bargain price. Such worries are real: you can't govern if you aren't elected; shareholders may simply sell their shares if a corporation's profits fall; and most consumers manage their limited incomes by searching out bargains. Sadly, plans for a longer-term future will probably not be put in place if people are preoccupied only with their immediate concerns.

Profits in Innovation and Growth

To understand profits, we need to understand why overall profits in an economy vary over time. This variation has been explained in terms of the development process, as first discussed by Schumpeter and then further explained by Lonergan in his *pure cycle theory* of innovative growth. In simple terms, the rising profits in the economy as a whole are the financial reward of increasing returns to innovations. That is because innovations either reduce the costs of production or introduce a better product for the same cost. And either, in turn, increases the gap between costs and prices and so raises profits.

When *unit profits,* or the profit you make on each item sold, rise in the expansion phase, their reinvestment will maintain growth as the innovation spreads throughout the industry and even beyond. Even if some profit appears in the rising incomes of CEOs, and in shareholders' dividends and capital gains, the tendency is to save and invest more of such incomes.

The savings and investment growth of a capital goods growth phase is characterized by a greater inequality of income and the reinvestment of profits. Many firms experience increasing returns or higher profits. But as innovations are generalized across an economy, decreasing returns herald the end of extraordinary profits. Changes in income distribution will occur initially in a firm or an industry. But when the resulting growth in consumer goods production takes over the economy as a whole, there is an increasing equality of income as profits fall and potential levels of employment and output are approached. Redistributing income depends on everyone adjusting his or her economic expectations and behaviour as the investment boom ends, at least for the time being.

The problem for people in free economies has been how to coordinate their economic activities in order to avoid a crisis or decline as investment growth falters. What is required is a change in the distribution of income, one that reflects the fall in profits associated with diminishing returns as the innovations are widely imitated. The income distribution adjustment occurs partly through the increases in productivity that lead to more and better consumer products, partly through lower prices as new products are mass produced, and partly through the rise in the incomes of people who consume most of their income.

But increased productivity means that fewer inputs of labour and materials are used to maintain the same production level and standard of living. In order to fully employ the resources no longer needed as productivity increases, business and other producers need to add to overall production. Moreover, ensuring that income distribution adjusts as profits fall will make possible increased consumption or sufficient demand for the new consumer goods and services being produced.

Let us take a moment to examine this problem more closely. How do the increasing returns of higher profits come to an end? The likely scenario in development situations is that other producers will imitate the new ideas as far as patents and intellectual property laws permit, and that the innovations will spread throughout the economy. The quantity of consumer goods being produced can then increase, and, to increase sales, prices will fall closer to production costs. In effect, the profit gap between price and cost gets smaller but can be spread over more goods. Think of the falling prices and huge volumes of computers or cell phones being sold today, or the low prices and huge volumes of Wal-Mart store sales.

Is there a limit, though, to this process of making production more efficient or of discovering new technologies? Several limits come immediately to mind: the scarcity of resources, such as fertile land and easily mined minerals; or the current size limit of oil tankers and the canals through which they travel. Some limits can be overcome by new technologies, while others cannot. But who can predict the future? As our societies and economies increasingly move to the production of services, the limits on resources—other than innovative and skilled human beings—may become less important. On the other hand, the consumer services now being produced by business and governments still use huge quantities of medical drugs, paper, energy, and equipment. The tradeoffs between economic growth and environmental change are truly challenging. As usual, we are left to move into the future as wisely and innovatively as possible.

We have already discussed, in chapter six, the distinction in production between capital goods and consumer goods. The history of the Industrial Revolution shows us how the merchants and industrialists financed new industrial production by reinvesting their profits or surplus. Our present standard of living is built, at least in part, on the savings of the generations that lived during the nineteenth and twentieth centuries. They made possible the reinvestment of forced or voluntary savings and profits.[71] Indeed, that investment in novel and increased producer goods eventually broadened the production of consumer goods, thereby supplying larger and larger sections of the population. Wages and living standards *did* rise eventually.

Consumption and Saving

But how do people spend their incomes from wages, salaries, interest, dividends, and transfer payments? Many of us consume most of our income. And part of our income goes to taxes for social benefits and government services. We may even think of our social benefits as money in the bank that will help us when we are sick, or unemployed. In fact, though, when we rely on our social benefits, we are assuming that governments will be able to continue paying for our present level of benefits with tax revenues. Traditionally, many of us have deposited in banks the income that is surplus to our daily needs. Individuals not only save in bank accounts and pension funds, they also invest in stocks and bonds of corporations, mutual funds, or guaranteed investment certificates. Economists call the savings that individuals put aside *household savings*. And as we saw in chapter four on money, banks lend the household savings they receive, investing them in businesses that plan to innovate or expand.

Businesses also save and accumulate from their income, both to maintain the producers' equipment they use, and to buy more as their enterprises grow and technology changes. As well, businesses can use foreign savings, the foreign investment flowing in from other countries. Governments, too, can save and invest in infrastructure goods such as repairing roads, and in services such as improving education. They may also subsidize industries or raise social benefits, when lobbies persuade them to do so. Understanding the role of profits in economic growth helps people to make their spending choices in terms of the economy's, as well as their own, needs.

Although the emphasis in the nineteenth century was on thrift and enterprise, the emphasis today is on whether consumers will continue to buy the goods and services produced. As we have seen, this is important when consumer goods are being mass-produced for sale. People today can more easily borrow money for consumption through consumer loans and credit cards. And both savings and investment have declined as a proportion of income in rich countries. The question of how people, corporations, and governments will choose between consuming and investing remains important for our economic futures.

Prices in Innovation and Growth

As we saw in chapter four, money is a medium of exchange. But it is also a common measure of prices, or value, in exchange. As Lonergan explained in the epigraph at the beginning of this chapter, we need to distinguish between changes in the relative price of a good or service in terms of other goods, and its money price. A rise in the relative price of a good is usually a sign that people want more of it, or that its supply has decreased. A general rise in money prices is usually the result of an increase in money and credit related to changes and growth in production in the economy.

The money-price rise can also be a sign of mismanagement of the money supply; that is, when its growth exceeds real production growth. If the money price or the overall price index of goods rises, the price, or value of money, will have fallen. *Serious inflation* will decrease the price of money, so that we need much more of it to buy the real goods and services that we are now used to having. The lower the value of money, the higher will be the money prices of the goods we buy. In extreme situations, the value of money can fall as much as 1000 percent in a year. Imagine how quickly you would have to spend your income to make it worth anything at all.[72] Just look at the example of Brazil: when inflation was very high, a tourist guide began adjusting the price of his tour twice a day after telephoning the bank to know the inflation rate or the exchange rate for U.S. dollars.

What happens to prices in successful economic growth? *Price indexes*, which we use to measure change in overall prices, tend to rise in an expansion; the reason is that entrepreneurs begin to borrow new money or credit to invest in their new ideas. The rise in the consumer price index is a first outcome of an expansion, with new employment and new materials creating new incomes before the new output increases. If the rising profits go to new production, the eventual rise in the output of goods and services will restrain such price increases.

As overall prices rise in the expansion, producers of consumer goods can reinvest their profits to improve and increase their means of production, thus participating in the benefits of economic growth. However, producers tend to watch the way their risks match their returns. They may be better off agreeing with their competitors to limit their production, if they have enough market control. A recent example is the collusion between British Airways and Virgin Airline. Such action allows firms to maintain their profit levels. Fully extending their production would lead to diminishing returns or falling profits on each item. However, when the new means of production are fully used in producing goods and services for the standard of living, the whole society benefits from the maintenance of employment incomes, as prices, and profits return to normal levels.

Sharing Production Income

Expansions are limited by the size of the economy. Let's look at what happens when increasing returns to investment taper off and decreasing returns take over. Decreasing returns happen because new or better consumer goods have begun to appear in markets. Prices will tend to fall as supply increases and shortages disappear. But when unit profits fall, how will the income distribution be adjusted? Any fall in unit profits affects the higher income groups such as shareholders and corporate managers. These groups benefit when businesses maintain their profits. Economists such as

Adam Smith, Hayek, Schumpeter, and Lonergan noted that the tendency for business people to collude for their own benefit was implicitly understood, and pervasive.[73]

But in actual economic growth, the time of high profits for a particular innovation does come to an end. This is clear in the history of profits, although it may surprise new investors or business owners. Or perhaps people are simply unwilling to accept change when their individual interests are at stake. Whatever the reasoning, however, to benefit society as a whole, businesses can increase production and employment, as long as total profit is sufficient for replacement investment or until new ideas are introduced and profits again increase.

Economic thinkers such as Schumpeter, Keynes, and Lonergan have all argued that maintaining investment in order to extend the production of consumer goods and services would maintain employment, overall incomes, and consumer spending.[74] Moreover, all three contend that the failure to extend production is caused by a misunderstanding of economic development as well as by the economic power of large producers to restrain trade.[75]

How can we be sure that the benefits of growth will in fact flow, rather than trickle down, to everyone? The English economist Frank Hahn explains, the demand for the expanding production of consumer goods and services must come from a relative expansion of the incomes of those groups that spend more of their incomes on consumption. The redistribution will occur normally through the decline in profits as the production of consumables is increased to its full potential. However, the distribution of income will be skewed when production and employment are restricted, thereby creating some scarcity of consumer goods and services along with high prices and profits.[76]

In the history of economic growth and development in the West, income shares have been a bone of contention, at least, that is, since Karl Marx claimed that workers' production was the sole source of economic value and that all the income from production belonged to the workers. In the early years of the Industrial Revolution, poverty and wretched living conditions sometimes led to violent struggles between workers and factory owners. Even today, confrontations are often still part of negotiations between labour and management about wages and benefits for workers. However, unions clearly give workers power in the workplace, something which independent workers do not have. But as we have seen, unions may work exclusively for the interests of their own members rather than society as a whole.

More recently, both unions and management have become better informed about the economy. And they have learned how to take account of the changing economic conditions in their negotiations. Two examples of smaller unions come to mind: the pilots' and other airline employees union that were not entirely unwilling to reduce their wages and benefits to prevent their company from closing; and the film industry unions who agreed to adjust overtime demands to keep film production in their region.

The other side of the question focuses on management's share of the rewards of production. What compensation should company executives receive? The issue is now being debated because of the recent high rewards of chief executives. The economist Robert J. Gordon questions whether North American company managers merit these high salaries, especially as statistics show that economic growth in efficiency and productivity is lower than in the past. Most executives are not, after all, film or sports stars with huge social followings. In effect, Gordon argues that the productivity increases, or increases in output per person, during the past fifty years have been disproportionately distributed to those already earning high incomes.[77]

Recently, criticism of the large differences between the rich and the poor, both nationally and internationally, has been getting louder. What, though, might be a fair sharing of the rewards of economic production? Lonergan's emphasis on functional production shares explained the variation in the assigning of income shares that occurs in a well-functioning process of innovation and growth. In that process, profits and higher incomes rise in the investment phase, while lower incomes rise as the production of consumer goods and services expands. With a better understanding of the changes in growth economic agents could adapt their money spending and real production activities for their own benefit and that of others.

Distribution of the rewards of production in a global economy can be thought of, too, in terms of the distribution of incomes across countries. The shift of textile and machine production, as well as office services, to countries where wages are much lower clearly benefits consumers in rich importing countries. As a result, goods can be imported for less than it would cost to produce the same goods in countries with higher incomes and benefits. But if producers find lower production costs abroad, what will workers in rich countries produce? Finding new goods and services to produce in the country where costs are higher is not easy. Some producers have turned to more innovative and technical production that requires more highly skilled workers and managers. But whatever the choices people make, both managers and workers may need new education and skills. Their new rewards for production will depend on the demand in the markets for whatever is produced. In fact, income levels for unskilled manufacturing jobs may move toward those paid for similar work in poorer countries, even as their lower wage levels rise.

Sharing Production Income and Social Justice

Does a fair distribution of production rewards constitute social justice? Friedrich Hayek had something to say about this. He distinguished between *rules of just individual conduct* that are imposed on us by our laws and regulations, and *ideals of social justice* that he saw as inherited from earlier traditional and command economies in which goods were, in fact, redistributed by those in power in the societies. But who redistributes in our mixed economy? Businesses and people with higher incomes pay taxes to governments and often support nonprofit enterprises that benefit people in various ways. In turn, governments redistribute income according to the laws of the country. Finally, nonprofit corporations or organizations, which produce their own goods and services, usually do so at cost, and often with the help of volunteers as well as government and corporate support. Whether the redistribution is enough and appropriate is worked out politically and socially.

Hayek reminded us that people in traditional and command economies were not free: they had to meet the obligations demanded of them. He speaks of the advantages of a dominantly market economy as follows:

> The great advance, which made possible the development of civilization and ultimately of the Open Society, was the gradual substitution of abstract rules of conduct for specific obligatory ends and, with it, the playing of a game for acting in concert under common indicators, thus fostering a spontaneous order. The great gain attained by this was that it made possible a procedure through which all relevant information widely dispersed was made available to ever-increas-

> ing numbers of men in the form of symbols, which we call market prices. But it meant that the incidence of the results on different persons and groups no longer satisfied the age-old instincts.[78]

In short, modern societies differ from traditional or more communal societies in that, today, they are based on abstract laws and rules of the economic, political, and social games that apply to everyone.

Hayek saw that as societies developed historically, there emerged a "codification of ethics which became embodied in the teaching of the monotheistic religions." Ethics emphasized a person's responsibility to neighbors or members of one's clan or tribe. In traditional societies, outsiders were still largely beyond moral obligation. A recent novel set in Africa tells of the struggle of a modern African who, although he lives in a modern society and economy, must still respond to the claims of his traditional clan or tribe. His clan depends on him as a successful person of their community. In most Western countries, governments treat all citizens alike—more according to law rather than clan or tribal relationships. But in predominantly market economies, progressive taxation and social benefits redistribute income. Yet kinship redistribution still exists within families or among friends. Philanthropy, which is often linked to the tax system is another way of caring for those in need beyond family members.

Democratic governments have responded to continuing unemployment by offering individuals the benefits of the welfare state. They have also maintained transitional income support to retrain people laid off in industries whose products are no longer in demand. That, of course, is a normal cost of retooling human capital as the economy changes. Social benefits can help people in all income groups to negotiate changes in employment. Even large corporations recognize this need when laying off their professional staff. Governments also provide temporary income support, although perhaps not enough to allow people to adapt to changes in employment. Note that welfare benefits that discourage employment and production have had negative social results over time. Many industrialized countries are finding that their too costly social programs will have to change. Economists are aware of the dilemmas in planning social programs. It is hard to reach the people truly in need with effective programs, while universal programs may waste resources. Undoubtedly, programs may be contributing to the major human loss and suffering of disadvantaged children.

If innovation and growth were fully implemented, so that the higher standard of living—understood as a broad spectrum of human needs and wants—were fully extended, production and employment could go a long way towards maintaining incomes and demand. Social programs could be tailored to develop a country's human capital in general, to help workers adapt to changes in production, and to support individuals whose health status may limit their capacity to produce.

Summary

This chapter discussed the relationship between profits and costs for producers, as well as the lack of a profit theory in macroeconomics. It presented Lonergan's theory of profit variation in innovative growth and its effect on incomes and prices. Also discussed were the changes in the functional distribution of income between consumption and saving that are needed in successful economic growth. These changes in distribution depend very much on whether the changes in production income go to higher-income groups who save and invest—as is needed during the capital building phase of growth, or whether production income raises the incomes of people who consume most of their income—as is needed when production to raise the general standard of living dominates growth. This chapter also considered the still confrontational attitudes in industry, and in society generally, with regard to income shares. In the next chapter, we turn to the elements that account for people's capacities or capabilities and their functionings in production.

The capacities of individuals, then, for the performance of operations, because they are plastic and perfectible, admit the development of skills and, indeed, of the very skills demanded by institutional roles and tasks. But besides the institutional basis of cooperation, there is also the concrete manner in which cooperation is working out. The same economic set-up is compatible with prosperity and with recession. The same constitutional and legal arrangements admit wide differences in political life and in the administration of justice. Similar roles for marriage and the family in one case generate domestic bliss and in another misery.

This concrete manner, in which cooperation actually is working out, is what is meant by the good of order . . . It has a basis in institutions but it is a product of much more, of all the skill and know-how, all the industry and resourcefulness, all the ambition and fellow-feeling of a whole people adapting to each change in circumstance, meeting each new emergency, struggling against every tendency to disorder.

– Bernard Lonergan

A functioning is an achievement of a person: what he or she manages to do or to be. It reflects, as it were, a part of the 'state' of that person. It has to be distinguished from the commodities, which are used to achieve those functionings . . . To consider acts of substantial choosing as being among the relevant 'functionings' is supportable also from the point of view that the quality of life a person enjoys is not merely a matter of what he or she achieves, but also of what options the person has had the opportunity to choose from. In this view the 'good life' is partly a life of genuine choice . . .

– Amartya Sen

Chapter Eight

CAPABILITIES FOR PRODUCTION

Capacities, Capabilities, and Functionings

Amartya Sen, a well-known economist and Nobel Prize winner, uses the term *capabilities* to explain the freedom a person has to choose the way he or she functions in life and work. Sen uses the term "freedom" not in the negative sense of freedom from interference, but in the positive sense of a person's ability to choose what he does or is; in other words to choose his *functionings*. As Sen explains, *functionings* depend on a person's entitlement to goods and services such as health care, education, and social relations, or even a bicycle. People's well-being or quality of life then depends both on their capabilities or their freedom to choose, and their functionings or actual achievement of entitlements to goods and services; for example, according to law and custom as well as through their access to income.

Similarly, Lonergan takes account of the way a person's effective freedom can be limited by his or her life circumstances. But he also contends that people can be limited by the state of their psychic balance, by their intellectual development, and by their willingness to act.[79]

From their birth and as they are growing up, human beings depend on their families, communities, and cultures for their livelihood. And part of growing to adulthood in every culture is the actual time individuals devote to preparing to take over as producers of that livelihood. People need education and training to acquire knowledge and skills. Education and training benefits the individual but is also important as a contribution to the economy and society. Economists sometimes call such preparation *human capital development.* Even hunter-gatherers in the earliest cultures and economies had to learn such survival skills. Today, as production changes, our globalizing economies are beginning to challenge people to learn new skills more often than merely once in their lives. Technology changes, and production may move to another country. For example, computers and the Internet have brought huge changes to production, and people increasingly accept that they need computer skills for many desirable jobs.

The more complex the economy, the harder it is to find a way to become a producer. There are so many choices and so many skill requirements. Just getting used to being ready to work eight hours a day—ready to get along with others you did not choose as friends—may be a major step for some people. Indeed, finding out about different possible kinds of work, and then acquiring the capabilities, diplomas, and work experience to function in the kinds of production you would like, can overwhelm some people. But through patient effort over several years, and without too much bad luck, people can usually find the production work they have prepared for. Along the way, however, some will adjust their goals to match the capabilities and functionings they find themselves able and willing to achieve.

Different Capabilities

Thinking about the variety and importance of production reminds us of the different motivations, intelligence, and capabilities that people bring to production in a complex, modern society. While some people have fewer opportunities, others have less ability. Still, most people do wish to contribute to their community, and a culture of contribution through production in one way or another may be valued and encouraged. Unfortunately, however, some people have been so challenged in their lives that their economic contributions will be small. But though their production income may be small, they are often able to contribute in other ways in the community. Fortunately, in successful economies, it is possible to add to people's low incomes via the tax system, through benefits such as public housing, and through private philanthropy.

Some kinds of production require special opportunities as well as a keen interest, the willingness to learn, and the self-discipline to persist. For instance, to be a champion skier in the Olympics—one who receives prize income, sponsorships, or advertising contracts—you may have to live near a giant ski hill and have received equipment and lessons from an early age. Of course, in many fields of work, especially those that are well paid and socially respected, there is intense competition to be included as a producer. One thinks of the competition to succeed as a lawyer, a medical specialist, a politician, an entrepreneur, a sports star, or a film star. Clearly, for success you need not only opportunity, talent, and hard work, but also luck. But almost every kind of production is valuable to society as a whole, and nearly everyone can find work that they like well enough and that contributes to other people's well-being. We now have entire industries set up to help people fit their talents, wishes, and energies into the diverse areas in which jobs are available and their production is needed. Nevertheless, some people have been so disadvantaged in their birth and upbringing that their capacities and functionings may require society to provide for their care.

Employment and Growth

The last chapter discussed changes in production, income, and prices during economic growth. Clearly, changes in production affect employment, and changes in employment affect people's income. How have economists explained these relationships? In his Nobel Prize lecture on how labour is supplied in production, Edward Prescott noted that it is not so much that people work fewer hours when the economy is in a slump and not working well, as it is the percentage of the working age population who have jobs that varies. He explains that the fraction of the working population employed in a period varies more than proportionally when production falls. Prescott also notes that the average labour supply per person for the economy as a whole depends on personal preferences as well as on technology. But the history of industrial economies shows that output increases more than proportionately to the numbers employed. In short, productivity or output per person increases during times of innovation and growth, as we discussed in chapters six and seven. And new investment and production are needed to maintain full employment.[80] Other economists, such as Schumpeter, Lonergan, Olivier Blanchard and Danny Quah, and Edmond Malinvaud have argued that productivity changes that result from innovation need not lead to unemployment if, in the expansion phase, investments are sufficiently extended, and if financial shocks, such as limiting credits, do not disrupt production.[81]

In all areas of production, the entrepreneurs are the people who not only bring about innovations but also often create jobs for others. Happily, governments are learning to encourage entrepreneurs through tax and other policies that help businesses to start up.

When the innovations of entrepreneurs succeed, productivity, or output per person, increases in the economy. Innovation may lead to unemployment if firms need fewer workers, or the production of now outdated goods and services comes to an end. People who were formerly employed must then find new jobs. Successful economies can adapt when the process of innovation and growth repeats itself by extending the innovation to other industries, or the economy develops in new directions. As economies become more productive, human needs and wants beyond consumer goods, such as learning and research, the arts and culture, can be met. Jobs in various kinds of service industries have also been organized in the nonprofit and public sectors. And these industries have become growth centres of employment and enterprise.

But individuals must still *themselves* be willing to adapt through new learning and, sometimes, new communities. Such changes are often painful. Clearly, people need to learn about changing employment possibilities. Today, governments and privately organized programs are learning how to smooth this adjustment through education and training, relocation help, and bridging income arrangements. Corporations often support their professional employees' relocation costs by providing income and other benefits for a transition period.

Over time, the areas of production that need people have changed, and they will continue to change. Take the near disappearance of cod fishing in Newfoundland, which led to new industries in fish farming, crafts, tourism, and government services. And more recent times have seen employment opportunities shift to different parts of the country. Witness the many workers from Atlantic Canada who have moved to new industries in Western Canada.

Within the past few years, many manufacturing jobs in North America have gone to countries that are emerging into the industrial age, especially China, India, and Brazil. Because people there are not yet used to the benefits and living standards typical of countries that industrialized earlier, they have been willing to accept lower incomes. Certainly, the incomes they do receive have made a big difference to their very low standard of living. Soon enough, however, these countries will become important producers in the world economy, requiring higher wages and more benefits. Japan's industrialization history is a good example.

Employment and Globalization

For the last few decades, we seem to have been overwhelmed by globalization. And its pace has certainly quickened. However, globalization is not new. Creative people have always explored new places and ideas, and our current ideas or even the planet itself will not limit the future. Production goes elsewhere, people migrate, new companies arrive from other countries, and old familiar companies operate under new owners from abroad. For example, we have seen how North American car manufacturers are now competing with Asian manufacturers, who are producing, even in North America, smaller, fuel-efficient, and less polluting cars. Clearly, manufacturing jobs in that industry have changed, and managers and workers adapt with more or less difficulty. In other industries, the manufacturing jobs go to countries in which goods can be produced at lower costs. However, the highly skilled service jobs in design, marketing, sales, advertising, and finance often remain or increase in number in North America. When textile manufacturing moved away from its traditional Italian home to the Netherlands in the sixteenth century, Italian manufacturers and workers continued to produce luxury fabrics and innovative textile designs. When human capacities for production, or the requisite knowledge, experience, and skills are present, adapting to new kinds of production is usually possible. For example, if you can build houses, you can construct sets for film, television, or theatre productions.

Does it matter that manufacturing is moving to emerging industrial economies? Certainly it does if your manufacturing job disappears. On the other hand, more jobs in North America are being created in the service industries. The areas of financial investment and markets, insurance, banking, real estate, government services, health maintenance and care, education, daycare for children of working mothers, sports coaching and organizing, seniors' care and housing—all fit into the category of service industries.

Many service jobs are also found in the retail trade of stores and restaurants. These workers do not require long periods of education and training, are usually offered minimum incomes, and often fill part-time jobs. These jobs may suit people such as students who study part-time; others who have family commitments and other sources of income; or people who are not able to work at more stressful, full-time jobs. On the other hand, such jobs can also lead to supervisory and managerial posts for people with the skills, energy, and luck to obtain them.

In their daily lives people have always had to face changes due to wars, economic recessions, death, and disease. Adapting can be very costly, and in ways that are not only economic. Rapid economic change is often criticized for being too disruptive. But it is unclear whether adapting production more slowly in a new economic situation is any easier on individuals who must change their employment and source of income. Moreover, when the response to economic change is more gradual, delays may occur in the startup of the new production centres. But easing economic change is always important. Governments in rich countries can provide help more easily than those in poor countries. International institutions such as the World Bank, which fund development programs in poor countries, could account in their budgets for the disruptive costs of economic change. Indeed, experience has shown that governments in recipient countries are often unable to provide adjustment help to those whose livelihoods have disappeared.

Summary

This chapter discussed how production is related to people's lives. It is clear we must work if we are to find ways to create the lives we would like to have. But people are born with different capacities and reach different levels of success. True, our lives are interdependent, but people are also competitive. Their success in work and life depends on their abilities and motivations, and also on the society in which they live; their access to financial means; their education and training; their friends and family; and, certainly, their luck. A person born poor or into a corrupt and war-torn country may well be out of luck. The next chapters on *Governments in the Economy* and *Foreign Products and Money* consider how a country's economy can be helped—or hindered—by its government and by its relations with the rest of the world.

Let the government spend each year some sum, beyond its income; since all expenditure generates income, this (sum of excess government spending) will generate an equal net surplus income (or profit) . . . finally, to prevent inflation let the government sell annually bonds . . .

The benefit of deficit government spending is that it enables an economy regulated by the idea of profit to continue functioning when there is an insufficient proportion of surplus income (or profit) resulting from real expansion. Profits are a matter of decreasing returns. When the returns tend to vanish they can be restored artificially by a favorable balance of trade or by deficit government spending.

Another advantage of deficit spending is that it simplifies taxation . . . But perfect taxing mechanisms are hard to devise, and the issuance of bonds has the favor of the rich, while taxes have the disfavor of all . . .

It remains that there are limits to deficit spending . . . there is the little matter of principal and interest. This has to be attended to, or it will become impossible to sell the bonds. But it can be attended to only by an ever-increasing burden of taxation. And the taxes can be paid only to the extent that the recipients of the interest and the amortization are a rentier class spending their income for the products of the rest of the community's work and property. Thus it is important that the ownership of the bonds be distributed very widely; otherwise the only method of payment open to the government would be the slightly equivocal method of confiscation . . .

BERNARD LONERGAN

Chapter Nine

GOVERNMENTS IN THE ECONOMY

Technical and Behavioural Elements in Economics

Because economics is a human science, it has both technical and behavioural elements. These elements are interrelated, with the technical side of the economy influencing people's behaviour and people's actions affecting what happens in markets, production, and growth. Let us first examine how the technical and behavioural are related in objective or positive economics, economics in which economists observe the data as well as develop and test theories to understand how the economy works. Economists also study how the activities of production, distribution, and exchange are changing so that people can adapt their behaviour in business, civil organizations, or government. The technical side of economics is what economists refer to as the *production constraint*. The production constraint is the upper limit of goods and services that people can produce with the technical, personal, material, and financial resources they have.

The second element in economics consists of people and how they behave in the economy.[82] Economists usually assume that they will *maximize their utility* when they buy and *maximize their profit* when they produce and sell. This maximization assumption is valid because we do try to make the best of any situation we are in. But the outcomes of people's maximizing behaviour depend on other variables as well. For example, how people perceive their best interests will depend on their understanding of how the economy works, as well as their moral understanding and development. And both will likely change with time. In liberal democracies, we expect people to act freely within the law. Indeed, many philosophers and economists have understood that free individual behaviour is not only based on narrow personal interests but also includes sympathy or fellow-feeling for other people in their families and communities. Such feelings find economic expression in philanthropy, in nonprofit production, in volunteering, and in the government's social policies.

What is Government's Role?

Governments in all times and places, from ancient empires to modern nation states, have considered production and wealth important—both for themselves and for their people. A liaison between the government's economic role and that of the private or market sector has always existed either formally or implicitly, with the question being how to define the balance between them. Karl Marx, who lived in England during its period of industrialization, and Karl Polanyi, who saw the social crises in Germany that accompanied industrialization and the consequences of World War I in that country, both emphasized the role of government as providers of their people's livelihood. Indeed, Polanyi saw the major growth of market economies during the nineteenth and early twentieth centuries as a temporary aberration in economic history.[83] However, other thinkers such as Michael McCormack and Friedrich Hayek have emphasized the continuity of commercial and exchange activities throughout history in ancient and modern societies.[84]

The continuing links between government and private free enterprise are clearly illustrated in the early explorations of Portugal and Spain. The governments of these countries encouraged adventurers and planters to open South America to plantations and trade. During the seventeenth and eighteenth centuries, government action in the economy was also part of the *mercantilist policies* of such nations as Britain and Holland. They gave royal charters or monopolies, for instance, to companies of private merchants to buy and sell in East Asia and America. These chartered companies managed to increase the merchants' own wealth, as well as that of their nations. They introduced exotic products such as tea, coffee, and sugar to their home markets. They imported raw materials for manufacture and exported the manufactured goods they produced. The countries that industrialized earlier had the advantage of being the first to build up their national economic power. Although the less technically developed countries that provided the raw materials did learn the skills of Western technology and organization, most of the benefits had already been dispersed to the European powers and the United States.

During the nineteenth century, the mercantilist policies that had led to early economic development were replaced by economic ideas more favourable to free markets and private enterprise. As the political power of industrialists increased in countries such as England, laws were passed allowing them to set up companies without a special government charter. They could produce, sell, and trade freely at home and abroad. This economic philosophy, known as *laissez faire,* held that a fair price, which depended on the supply and demand for goods or services, could be worked out in markets without government interference. However, despite the business climate of *laissez-faire,* business people depended on governments for public order and public goods such as defence, harbours, roads, and laws that supported business development. Still, the belief in *laissez faire* and economic progress prevailed in industrial economies until recurrent economic crises and unemployment created social suffering that was no longer politically acceptable, particularly as more citizens were being given the right to vote in elections. Slowly governments began to provide income for the unemployed. Germany had many elements of the welfare state from the end of the nineteenth century and Britain's National Insurance Act of 1911 introduced a compulsory insurance program that covered some workers. By the end of the 1940s, eleven Western democracies had employment insurance schemes that were either compulsory or voluntary.[85]

The balance between governments and private enterprise changed as a result of the Great War and the major depressions that followed. John Maynard Keynes, in his book *The General Theory of Employment, Interest, and Money,* explained how governments could play a role in stabilizing the economy. He showed how economic crises could persist if governments did not take action. Money and credit would decline, he said, because people would withdraw their cash from circulation, investing the reserves later when interest rates had risen. He saw government spending to restart the economy as the only solution—"a priming of the economic pump," as he put it. In effect, Keynes showed how governments could act effectively in the economy by adjusting their taxes and spending as well as their money and interest rate policies to end a crisis.

However, Keynes did not study longer-run economic growth and development. As he said, "In the long run we are all dead." He did worry, though, about stagnation in the industrial economies that had grown so much in the century after 1850. Keynes focused on the economy in the short run and on how government policies could maintain an effective consumption and investment demand for consumer and producer goods. He contended that government spending could increase production and jobs, and lower interest rates could encourage entrepreneurs to invest. In the period following World War II, Keynes's economic thought was an important influence on governments' tax-and-spend or fiscal policies, as well as governments' monetary or banking policies.

Writing at the same period in the 1940s, Bernard Lonergan looked not to government action to stabilize the economy, but to a better performance by business people and others in using the potential of development and growth. He maintained that the producer goods developed during an expansion phase could be used to fully extend the production of related consumer goods and services, as long as production costs and depreciation were fully covered. This process, explained in chapters six and seven, shows how the extended production for the standard of living would also maintain employment and incomes. However, the massive production of consumer goods since World War II, Lonergan contends, often has been made possible by deficit government spending. Although the economy grew faster than the resulting government debt, pockets of poverty and backwardness have remained.[86]

Lonergan discussed the role of government in the economy mainly in terms of balancing the government's budget over time. He explained the ways in which government spending could cause imbalances in an economy that is experiencing innovation and growth. In an expansion, he said, government spending that exceeds tax revenues, adding new money to the economy, could provide needed savings for investment or could simply be inflationary. He also understood that similar excess government spending can help an economy to grow under certain circumstances, and that a larger economy can create more tax revenues to reduce the debt accumulated by past government budget deficits.

However, for successful economic growth, Lonergan argued that the flow of money interest payments on the government debt must also match the production growth phases in the economy. Such interest payments can be added to savings and investment when growth in the means of production is dominant. But when growth in products that raise the standard of living is dominant, only if government debt is widely held by people with lower incomes, will the consumption of such income create sufficient demand. Lonergan also pointed out that government debt that is used to finance excess government spending can also create a future tax burden on people and businesses. He believed that, apart from rare debt forgiveness or national bankruptcy, taxes must eventually be raised to pay down the debt that grows faster than the economy.[87]

The Welfare State

The long experience and misery of the Great Depression and the spirit of sharing that developed during World War II prepared governments to offer educational benefits to returning soldiers as well as other social benefits. The affluence of industrial economies after the war made such generosity possible as programs could be financed by progressive systems of taxation.[88] These ways of redistributing income through laws and government policies underpin the *welfare state* system. While the welfare state has certainly benefited many, some economists who have studied its effects have criticized it.[89] One criticism is that the expenditures, which are largely consumed, may be crowding out government's ability to use tax revenues to invest in the future, or that high taxes crowd out private investment. Moreover, welfare benefits may make people less willing to work for a living or to adapt to changes in employment. Finally, government tax revenues may be unable to cover the costs of certain benefits.

Lonergan thought that the welfare state was a palliative response to unemployment, one that would be greatly limited if the productive process of economic development and growth functioned well. Under these circumstances, he said, the ongoing reinvestment in the economy of the extraordinary profits of innovation, to the point of diminishing returns, would make it possible to extend the production of broadly defined consumer goods and services. As outlined in chapters six and seven, such an extension of production would create the necessary shift in income distribution from profits to incomes that are more fully consumed. It would also ensure a much fuller employment of human resources.

Clearly, Lonergan thought that everyone, not just government policy makers, needs a better understanding of the economic growth process. He felt that such an understanding could better in-form business, labour, and government policy choices. He argued that government economic policy should depend on the current growth phase of an economy. Statistics on the relative growth in production of producer goods and consumer goods, he said, would make that clear. A better understanding of economic development and growth would require both adequate government support of the people who are adapting to changes in production and employment, as well as a willingness on the part of corporate shareholders and managers to accept the cyclical changes in profits that occur as part of development and growth. Lonergan looked to better general economic education to give people an understanding of growth. Private and public policies could then ensure that everyone benefits.

Balancing Business and Government

Clearly, some goods that economists call *public goods* (highways, airports, and public transport) are better produced once and for all by government itself, or by agencies or corporations regulated by government. Economists acknowledge that a system of markets cannot produce all the goods and services that individuals and society need and want. One such market failure occurs when private production and consumption create *positive or negative externalities. Externalities* are benefits or costs that are not included in the market price of a good. For example, people who become better educated usually benefit themselves, but they also benefit the community they live in. In other words, education is a social good that has a positive externality or benefit, and governments usually subsidize education to ensure that there will be enough to capture those social benefits.

Similarly, pollution is a negative externality because market producers and consumers create waste that is costly to control. How will governments respond? Governments can tax production or consumption that pollutes. Think of our garbage collection tax. We have taxed tobacco manufacturers and, indirectly, their consumers as well. Moreover, we are currently planning how best to reduce the effects of greenhouse gases on world climate change. Negative externalities of production and consumption can be reduced enough so that ongoing pollution levels are sustainable. In practice, however, it may be difficult for governments to calculate the money costs of pollution in order to choose appropriate taxes or incentives.

When citizens are willing to pay via taxes or higher prices for a better environment, governments can regulate industry or directly provide goods or services such as clean water. In a democratic political system, people need to be well informed if they are to judge between the advantages of a public provision of goods and services and their private production with government regulation.

Some goods that are publicly provided can become overused because users cannot be excluded from using them. One example is crowded roads in urban centers, especially at rush hour. That problem was partially handled in London, England, by charging users of private vehicles a fee to drive into the centre of London. Another policy now being discussed by many governments is whether the conservation of a clean water supply could be obtained by charging for its use beyond an agreed minimum level.

When the goals of government and business are similar, businesses often depend on their government connections for support. The histories of colonial powers, as well as the foreign policies of today's nation states, clearly show the crucial links that obtain between their governments and the activities of businesses at home and abroad. Some economists, and others, argue that the well-organized business lobbies and other pressure groups skew government's ability to act effectively in the economy. While studies in public economics have shown that there is an independent basis for government action in the economy, governments may nevertheless fail to implement the policies needed to complement production and market activities in the private economy. Some of these questions are considered in the next chapter on *Foreign Products and Money.*

Summary

This chapter has broadened the discussion of economies beyond an objective analysis of how the economy works. We considered ways in which human behaviour influences the economy, whether individually, via social and business groups of civil society, or through government policies. We reviewed several economists' differing views on the role of governments in the economy. Of course, people's expectations about their government's economic role as producers and distributors of national income do change. And some governments, faced with the rising cost of universal social programs and other government spending as well as current taxation limits, are reconsidering the effectiveness of their policies.

Lonergan, however, proposed that a basis for government policies can be found in a better understanding of the process of economic innovation and growth. Such an understanding would lead to economic behaviour focused on production and full investment to broaden the benefits of economic growth. That behaviour would, in turn, both minimize unemployment and foster the realization that profits can vary from increasing to diminishing returns to production as investment and consumption are fully extended.[90]

The next chapter carries the story one step further, by considering how the economies of the world are related through their merchandise trade as well as their international financial transactions. It asks what international organizations do on behalf of their member countries. How, we ask, can they and their members keep international payments and capital flows in balance when people move money and credit around the world, according to the supply and demand for currencies, in a free system of international financial markets?

The interest of the free economies in a favorable balance of foreign trade has a very solid foundation. Prior to the full development of monetary techniques, an excess export of goods and services was balanced by an excess import of gold; this increased the quantity of money available in the economy; and this increase in the economy made possible an equal increase in the circuits (of production, distribution, and exchange). But the expansion of the circuits is, in large part, conditioned by the possibility of increasing the quantity of money available for the transactions of the circuits. Thus a favorable balance of trade, balanced by a favorable balance of gold imports, was a means of satisfying a principal condition for economic expansion . . .

The international monetary phenomena are quite simple. In a first period, payments are made in gold. The countries with the favorable balance are thus enabled to undertake expansions in virtue of their increased stocks of money. The countries with the unfavorable balance suffer equal contractions, until they discover the cause of the trouble. Then they practice the doctrine of mercantilism: foreign trade is controlled so that there is no unfavorable balance of trade. In the long run, the only countries that will balance an excess import by the export of gold are either gold-producing countries or else backward economies in which there exist stocks of gold which can be de-hoarded. In a second period, there develops the practice of foreign lending. Countries with unfavorable balances of trade have bills of exchange pile up against them in the exporting countries; these are liquidated by floating long-term foreign loans or, when an economy which previously enjoyed a favorable balance turns to an unfavorable balance, by selling domestically owned foreign securities . . .

– BERNARD LONERGAN

Chapter Ten

FOREIGN PRODUCTS AND MONEY

World Trade with Different Currencies

Economists analyze world trade from the perspective of various different national economies. Most countries have their own currencies. But sometimes countries price their exports in U.S. dollars when they are selling to the United States, or simply because U.S. dollars are a widely accepted currency. When we buy the products of another country or travel there, we must exchange our national currency for the currency of the other country. Similarly foreigners, who purchase our exports, must buy our currency to make those purchases. In short, the supply of and demand for currencies in international money markets is also part of the story when we buy foreign products or sell our products abroad. As economists tell it, in a world in which foreign trade and money flows are so important, a country's economic health depends not only on balancing the country's exports and imports, but on dealing with the demand and supply for its currency. International institutions can monitor currencies and help to keep payments in balance. But, in fact, powerful people and nations can and do act in their own narrow interests. International players have, so far, not been willing to put in place policies that would reduce international financial volatility.

Foreign Investment and Growth

As we saw in chapter six on *Products that Make the Economy Grow,* new producer goods make it possible to expand the production of consumer goods. For example, developing countries may have people and resources, but lack the funds for investments with which to expand their economies and improve their people's livelihood and well-being. They need to invest in people, in infrastructure, and in industrial equipment. Of course, it would help if people in other countries invested some of their savings in the economy in need of development.

Foreign enterprises could open a factory, a farm, or a mine and create jobs. Such actions can create a one-time demand for that country's currency, which, in turn, can increase the money supply in the country and support an economic expansion. However, if the investment involves lending money, the foreign investors could create a debt for the borrowing country that would entail eventually paying back the capital amount as well as the interest. If the country's economy grows as a result of the foreign investment, debt repayments could be easier. But repayments may also reduce a country's growth potential; that is, if profits are directed to repaying the debt instead of being reinvested in further development. To benefit the borrowing country, the profits from foreign investment should be sufficient to cover both debt repayment and investment in development.

The extraction of the oil in the Alberta tar sands is one recent example of economic development in Canada. The foreign demand for Canadian resources raised the value of the Canadian dollar (i.e., more Canadian dollars were being demanded). Of course, balancing the supply and demand for national currencies in financial markets is only one aspect of world trade in goods and services. World trade includes both consumer goods, such as foreign foods and travel, and capital goods, such as equipment, technical knowledge, and financial investment. This chapter will explore how economists and business people, governments, and world institutions have all tried to understand and balance the flows of consumer and producer goods and services, as well as the flows of different currencies in international money markets.

National Interest and Global Trade

There is a change afoot regarding the traditional focus of economic analysis on the national economy and its related study of international trade. The growing interdependence of economies has encouraged economists to study clusters of countries, such as the Organization for Economic Co-operation and Development (OECD) that groups together 30 industrialized countries that see themselves as committed to democratic government and a market economy. Because most industrialized countries gather their data in the same way, these groupings allow for broader economic analysis and comparisons. Data collection in the *emerging market* countries follows the same pattern—at least, once these countries join international organizations, such as the International Monetary Fund (IMF), and become associated with the World Bank group of organizations.[91] International trade is also growing among emerging market economies that are busy industrializing.

Governments must keep in mind what is happening overall to the goods and services their countries import and export. Governments must also keep track of the money and credit that flows into and out of their countries. In Canada, for example, trade accounts for forty percent of the country's economy. The dilemma, for countries like Canada with relatively small populations, is that production for export makes them more dependent on the willingness of other countries to conform to trading agreements. While international treaties help to stabilize international relations, powerful nations can act more freely in their own interest. Nevertheless, production for export can optimize the economic outcomes for a country. Note, however, that economic groups within the country will be differently affected by changes in trade, as would be the case for most economic changes. In an affluent, democratic country, it is possible for the groups harmed by changes, to bargain for benefits that will help them adapt to changes. This trade off, which allows the community as a whole to benefit from world trade, is still another example of the redistributional role that government can play.

A recent example of trade difficulties was the major effect on European clothing manufacturers of cheaper clothing from China. The Chinese and European governments held many meetings. Temporary quotas were imposed to limit clothing imports and protect the European manufacturers while they adapted their production. Mind you, the cheaper clothing has certainly benefited European consumers, who now have income for other purchases. Moreover, for some time to come, Asian manufacturers will have the advantage over their European competitors of lower labor costs. Historically and today, wages are low as countries first industrialize, but wages replace a rural standard of living that was minimal and isolated from services and opportunities. This was true for England, France, Germany, and later Japan as they began industrializing.

World Trade in History

Globalization is not an entirely new phenomenon. People have always reached out to the ends of the known world and beyond. Think of the Roman invasions of Britain and Spain; Alexander the

Great's march through Persia; and the traders and explorers who brought Buddhism from India to China and Japan, and Islam from the Middle East to Asia and North Africa. Woven into all these expeditions was the expectation of raiding opportunities and trading in products, money, and ideas. Indeed, history bears out the view that a nation's political and economic power matters in international economic relations. In effect, trade between states has not always distinguished itself from wars or raids. One has only to remember the Scandinavian Vikings who, about the end of the first millennium, raided the countryside and then stayed on in fortified centres in Western Europe to trade for food and other needs.

Trade abounded in the ancient empires as well. Rome imported grain from Egypt to supply food to the people of Rome and to feed the army that maintained the frontiers of the empire. China, during some periods, certainly controlled trade in the South China Sea and beyond. And certainly, trade was a source of surplus and wealth in the Italian city-states during the Middle Ages.

Somewhat later, adventurers from Portugal, Spain, Holland, England, and France all sailed to the American hemisphere—for the sake of trade and the wealth it might bring. During the seventeenth and eighteenth centuries, with the Industrial Revolution's development of commerce and shipping in Europe—first in Holland and England, then in France and Germany—the quality of globalization changed. Countries defined themselves nationally and sought, by various means, to systematically extend their wealth and power. They acquired colonies, with resources, to support their developing industrial economies. In effect, European manufacturing needed foreign markets in which to sell their goods (textiles and guns) in exchange for foreign resources and food supplies (cotton, sugar, gold and silver, furs and timber).

Historically, the interests of the more powerful partner have largely defined trading practices between developed and less-developed countries. Take the trade in Canada with native people, where a musket could be exchanged for an equally tall pile of beaver pelts. As long as fur hats were in fashion, the fur merchants who took the risks could make high profits in European markets. Traditionally, trade has tended to benefit the country that could provide the capital and produce the manufactured consumer goods, as well as the loans needed to finance such projects. People in countries that were among the first to industrialize have also had the advantage of enough time and wealth to develop the institutions and systems of government that stabilize society as the economy industrializes and changes.

Communication and travel helped to create a global economy as well. The explosion of communication in the last fifty years has made everyone with a computer connected to the Internet, a television, or a radio aware of what is happening around the world. Everyone can judge for themselves the wealth or poverty of people and the efficacy and morality of the wars being fought. The actions of nations in pursuit of their advantage are also visible to everyone. The broadcast media may sometimes be state regulated, but the text, sound, or images on the Internet from multiple sources are harder to control. In many countries, however, the more or less censured broadcast media, such as television and radio, are still serving as the dominant form of communication.

Although our world is more and more integrated, we still feel part of the country we live in; we still generally depend on our country for our political freedom, rights, and security as well as our livelihood, jobs, and community. But the growing presence of a global economy in our lives has brought about many changes—both pleasant and disruptive. Certainly, our lives have been enriched with new and amazing goods and services. On the one hand, global production can transfer technical know-how and financial resources to people in developing countries. Global production can also lead to the disappearance of traditional methods of farming and food gathering, as well as to the disappearance of regional and local knowledge of plants and animals that have sustained traditional cultures in many places around the world. Globalization also encourages people to migrate from poor countries to lands where opportunities for themselves and their children are better.

Patterns of Development, Growth, and Trade

Do countries need net inflows of capital or an export surplus to grow? The general answer is that they do. As Lonergan also argued, if a country's economy is expanding, positive financial flows are like profits that can be reinvested as the mercantilists of the seventeenth century well understood.[92] The American Marshall Plan provided the capital for the reorganization of the European economies following World War II. And the postwar European economic development was successful, in part because European civil and government institutions had existed for generations, and the population had the necessary education and skills. However, it is less clear whether foreign investment alone can be effective in national economies that lack the necessary infrastructure, skills, civil institutions, and representative governments. We just have to look at the failures—apart from aid for education, health, and humanitarian emergencies—of international development programs in poor countries.[93]

But how will the capital needed to strengthen a developing country's economic base be invested unless there is the possibility of making a profit? Apart from ongoing government-to-government aid, private aid, and projects in health and education, the current philosophy of development encourages private foreign investment and focuses on developing resources that can be farmed or mined, and exported. This strategy may work, or it may create problems. Take the case of commodities such as coffee, wheat, soybeans, oil, gold, and other metals that must find their price in world markets. The commodity is priced by quality and distance from the market. Yet any advantage in local prices can be arbitraged away by brokers, who buy the commodity in countries where it is cheap and sell where the price is higher.

In world commodity markets, prices vary according to the supply and demand for the commodity in question. The hopes of developing countries—that the sale of their cash crops in the world market will give them the profits they need for development—are sometimes disappointed. When coffee began to be produced in more and more countries as an exportable cash crop, world prices for coffee fell. People simply did not want to drink as much coffee as was being supplied. Oil producers, however, benefited from the sale of their resources, partly because they managed to control supply. Clearly, development plans made by international organizations like the International Monetary Fund (IMF) and the World Bank can upset the balance between global demand and supply for commodities traded in world markets. And a rise or fall in the world price of important products can also create currency problems in world money markets by changing the supply of, and demand for, national currencies of importers and exporters. The export of globally traded agricultural products and minerals has nevertheless been important to Canadian and U.S. economic development. There are two caveats to such development strategies, however: trade treaties may restrict development beyond resource extraction; and non-renewable resources will eventually be mined out.

Several international factors can support or hinder a country's economic growth. As Lonergan explained in his discussion of development and growth, excessive investment may prevent the ensuing growth in the production of consumables. This was the case for early industrializers such as England, where wages did not rise until 1870 to allow for the mass production of consumer goods. As well, in the centrally planned economies once linked to the Soviet Union, planners have been criticized for failing to shift from capital and infrastructure investment to the mass production of consumer goods and services for their people's well-being.[94]

Is China's still partially centralized economy also failing to shift its emphasis to the mass production of consumer goods? The United States and other countries are calling on China to expand domestic consumption by saving less and upping wages. China is in a phase of rapid economic growth, one encouraged by its export surpluses and its educated and industrious population. Foreign companies are also quite willing to invest in China because they anticipate a large market for their products. But China has domestic savings as well as foreign savings from its export surpluses, in addition to its direct investment by foreigners. Reports indicate that China currently invests about 40 percent of its GDP. Clearly, China is attracting a lot of attention abroad as it attempts to move toward the development phase of a relatively higher growth in domestic consumer goods and services.

A similar story can be told of the oil-producing countries during the 1970s. Their export surpluses led to huge increases for them in savings or profits from foreign sources. However, profits were often invested in foreign institutions rather than used to diversify their economies. At the same time, countries that relied on oil imports saw worsened international current accounts for their trade and payments. Their savings went to pay the oil producers, and their ability to invest in their economic development fell sharply. Many foreign debts were created to restore oil-importing countries' trade and foreign payment balances. These debts were often owed to the commercial banks that had given oil-importing countries the foreign loan credits they needed to pay for their oil.

What roles do foreign savings and investment play, these days, in the countries that industrialized earlier? With investment levels close to 20 percent of GDP, and manufacturing becoming an ever-smaller part of their total production, are older industrialized economies investing enough to adapt their economies? Are they investing enough to move toward more sustainable production methods? In these countries, savings and investments have been trending down since the 1970s, partly because investment in information technology has been important across the world and relatively cheap to buy. Developments in financial institutions, government guarantees of smaller bank deposits, and the growth in consumer credit facilities have also tended to reduce people's saving habits. And countries with ageing populations tend to save less. In the future, the new savings and investment needed to adapt to production and employment changes in our global economies will depend on both national and international savings and investment.

Another factor in international trade is the search for resources. The U.S. government's trade policies with the American hemisphere and the Middle East are partly based on their resource needs. For similar reasons, European countries and China are interested in Africa, which is a resource-rich continent. Industrialized countries' desire for a free flow of resources contrasts with their restrictions on migration. Nevertheless, countries that are already industrialized and affluent need workers who are willing to do the unpleasant or dangerous jobs that the industrialized countries' own people may prefer to avoid. People in poorer nation states see that it is possible to move to countries where they have better opportunities. But immigrants and refugees are sometimes not welcome or have trouble adapting to a very different culture. Still, ageing populations and unfilled job opportunities indicate that industrialized countries often need immigrants. Both citizens and new migrants need help changing jobs and learning new skills, languages, and attitudes. Governments and social organizations can smooth the transitions, in both work and social environments, by formal and informal gestures and activities at the national level as well as in smaller communities.

Is the world becoming more integrated politically? It is if the integration is measured by the number of meetings that gather participants and representatives from most countries of the world. However, results are slow to emerge from international meetings, and often nation-states are even slower to act on them. Participant countries have different political systems; different levels of political order and security; and different standards of living, traditions, and needs. And with different levels of wealth and power, some more than others will influence the direction of decisions at the international meetings. Since the development of the nation-state in the seventeenth century, national interest—not global interest—has been the principal concern of states and their governments. Still, as members of international institutions, nations may move away from confrontation, towards negotiating cooperation or at least co-existence. Witness the rivalries between European countries, which during the last century led to two world wars within fifty years and are now more contained within the European Union. Although many issues remain to be resolved, it is unlikely that the European Union will disappear.

In a similar way, trade agreements between groups of countries create possibilities that can benefit all parties. But the relative power of the countries that are negotiating agreements continues to be crucial to the outcome and, especially, to the way in which the agreements will work over time. Fortunately, the success of a nation in international trade negotiations also depends on its ability to work with other countries that may share its policy approaches. A country's potential economic power depends on its size, population, and wealth, but achieving development also depends on the stability and ability of its government, the education and health of its men and women, and the extent of its inhabitants' knowledge of the modern tools of production and finance. In many middle-income countries, and especially in poor countries, one or other of these elements is weak or absent. International governmental and nongovernmental organizations, as well as civil organizations in the countries themselves, can work to remedy these weaknesses. But human development also takes time, capacity, and goodwill, as we discussed in chapter eight on *Capabilities for Production.*

Organizations for International Trade and Payments

In 1995, the World Trade Organization (WTO) evolved from the General Agreement on Tariffs and Trade (GATT). From the early days of the GATT, developing nations wanted to have temporary protection from the manufactured exports of developed nations, while they established their own domestic manufacturing. Developing countries did enjoy some protection under the Generalized System of Preferences (GSP) of the GATT. This system was developed by the United Nations Commission on Trade and Development (UNCTAD) in 1964 and was incorporated by the GATT in 1971. It is revised every ten years, and enables special tariff arrangements to encourage trade between developing and developed countries. While the GSP has helped, developing nations still felt that the GATT was a club in which industrialized nations had all the power.

Meanwhile, the development of the European common market, eventually the European Union, with a common currency for thirteen of its twenty-seven member countries, was a process that encouraged the United States to pursue multilateral trade negotiations. This led to the decision by the GATT to give all countries equivalent access to the markets of industrialized member nations through the use of the Most Favoured Nation (MFN) formula. While this idea gave access to trade for both developed and developing nations, it eroded any preferential access to markets that former colonies had in, for example, the markets of their former colonial rulers. This loss of preference has been significant for agricultural exports as well as textiles, fish, leather, electrical machinery, and wood products from African, Asian, and Central American countries and even from Canada, Australia, and New Zealand. Recently American trade policy has aimed at free trade within the American Hemisphere and has succeeded in agreements for more open trade with Peru and countries in Central America. However, hemispheric free trade continues to be resisted by the governments of the major South American countries.[95] On the other hand, U.S. import policies tend to be restricted by the economic and political concerns of different regions within the United States. The WTO is the body that settles the trade disputes of its members. But it is the countries involved in the dispute that negotiate the terms of the WTO decision. Trade negotiations tend to become complex and detailed especially when major industries in developed countries are affected.

The current Doha round of WTO trade negotiations was planned to consider trade in agricultural products so that farmers in developing countries could sell in developed countries. But the recent international negotiations were not fruitful. In general, rich countries are still reluctant to reduce their own agricultural subsidies, which encourage farmers to produce more food than can be sold domestically. However, these subsidies harm poor countries: they receive cheap food imports and gifts of food that compete with their own farmers' produce. As well, rich country subsidies and regulations on agricultural imports deny poor country farmers access to their markets. New trade agreements, which work toward reducing the agricultural subsidies of industrialized nations and opening their markets to agricultural imports, would help to develop farming in poor countries. Indeed, some developing countries now argue that the trade agreements that let foreign manufacturers into their markets must be linked with new agreements that allow their agricultural products into European and North American markets.

New trade treaties are usually phased in over extended periods of time as countries reorganize their industries formerly protected from imports by tariffs and quotas. Over time, lower tariffs do tend to encourage production in new areas to take advantage of market changes. But it is not easy to predict how lower trade barriers will affect an economy in particular cases. Tariffs or custom duties can be a source of government revenue when populations survive on the food they grow and have little taxable money income. Trade barriers can help as a country industrializes by allowing new industries a chance to sell their products locally before being forced to compete with foreign imports. Economists recognize that people's well-being may not improve by removing one distortion in prices, like a tariff, when there are other distortions in an economy.[96] In fact, trade policies generally depend on how they are administered and whether they continue to be appropriate over time.

As the world becomes more interconnected, international private investment seeks production and marketing sites in economies that are starting to grow, that have the needed resources, or that have large markets. Multinational and global corporations are more than willing to invest in countries where they see opportunities for profit, and where risks are not too high. Of course, the threat of war and unstable governments discourages business investment.

The World Bank and commercial banks are ready to lend financial resources to governments or private development projects that meet bank and donor requirements. But international institutions and commercial banks do not generally offer financing to small and medium enterprises. Some countries are trying to fill this funding gap by using micro-banks that provide small loans to help small businesses get started. And the World Bank is beginning to direct financing to small and medium-sized businesses. Recently, the International Financial Corporation (IFC), a World Bank organization, has been encouraging private investment in businesses. Yet in 2004, 90 percent of its financing was located in major developing countries such as Brazil, India, China, Russia, and Mexico. In cooperation with the International Development Association (IDA), the IFC plans to help with the design and financing of small business in poorer countries.

At the end of the Korean War and the re-establishment of the European economies, the World Bank and the International Monetary Fund turned their attention to the problems of the world's poor countries. One recent development approach by national governments, judging from the actions they take in international organizations or in their bilateral agreements with other countries, has been to forgive some of the poorest countries' debts that are owed to foreign governments, banks, and international organizations. But whose debts should be forgiven is also a political issue, one that depends on which powerful nations are the poor country's creditors or friends. Often, these poor-country debts have grown over time. Interest payments could not be made in full, and the interest owed was simply added to the capital amount of the loan. Questions about who contracted the debts and whether they were for development programs, military equipment, or private bank accounts may receive different answers in different countries.

International organizations as well as national governments and their citizens also aim to assist with education, health care, and infrastructure such as the building of roads, water systems, and electrification networks. And nongovernmental organizations (NGOs) from developed nations have long been active in education and health, as well as other services. NGOs are usually nonprofit organizations, but it is difficult for workers from rich countries to live at the standard of people in poor countries. Clearly, the situation in poorer countries can be improved so that their people can help themselves. Aid initiatives have sometimes been criticized. Too often, they reflect the biases of another culture and show little interest in the cultural values of the group being helped. International organizations, in particular, have been criticized for being too bureaucratic and trying to pursue too many goals at once.[97]

Balancing International Payments

As Lonergan also argued in the epigraph at the beginning of the chapter, a country's economy needs to aim toward balancing its inflows and outflows of international money payments.[98] These payments make up a country's current and capital accounts. The *current account* covers payments for trade in goods and services as well as payments for travel, profits and other business income, gifts, grants, and donations. The *capital account* is made up of inflows from foreign investment and outflows of domestic investment abroad. The capital goes into new business, into stocks and bonds of established businesses, and into other financial instruments that change the ownership of assets or wealth. Such capital inflows can also help to balance a country's current account, by creating a one-time addition to its international payments. Together, the current and capital accounts make up a country's *balance of payments*. Canada's current account, for example, often depends on a surplus in its payments for merchandise exports. These payment inflows can balance outflows of payments for travel, dividend and interest income, and people's transfers or gifts to their families abroad. Those transfers or remittances often improve the balance of payments of Canadians' diverse countries of origin.

The U.S. current account has recently seen major deficits. Trade numbers for goods and services show that the United States currently imports far more than it exports. On the other hand, there is still an inflow of foreign investment into the capital account, as well as an income flow from American investment abroad that goes into the U.S. current account. In effect, the U.S. capital account will be positive as long as foreign investment in the United States is greater than the U.S. investment abroad.

In a world economy, exports from one country are imports to another. And large international deficits in one country must be balanced by surpluses elsewhere. The IMF finds that the U.S. imbalances on its current account will need the responses of a large number of countries, inasmuch as about two-thirds of the U.S. current account deficit is offset by current account surpluses in emerging market and oil-producing countries. Of course, some of the trade imbalance is also matched by foreigners' purchases of U.S. Treasury Bills through the capital account and by foreigners' willingness to hold U.S. dollars as a reliable world currency. U.S. Treasury Bills and other portfolio investment can be sold in stock and bond markets and are considered short-term investment that depends on investors' expectations about the future. Because the

United States is such an important market for exports, foreigners from major exporting countries or countries with less reliable currencies have been comfortable holding U.S. Treasury Bills or U.S. currency.

In the case of the major U.S. current account imbalance, the IMF has suggested that the policy most likely to adjust the current account deficit of the United States would be a reduction of the U.S. federal budget deficit. However, achieving that would require more tax revenues and less spending, both unpopular policies.[99] Another solution would be an increased demand for U.S. exports as a result of the fall in value of the U.S. dollar over the last three years.

Currency imbalances in its members' international payments are the kind of issue that the IMF was founded to address. One of its policies has been to insist on members allowing foreigners to buy short-term financial assets in their countries, thus liberalizing their capital accounts as well as their current accounts. Economists and others have criticized this policy as a source of international financial volatility and a factor in the Asian Crisis of 1997. Moreover, the policy runs counter to the policies of European countries during their reconstruction period after World War II, when they kept some control over capital movements into their countries.[100]

The IMF has also been criticized for the lack of an open process in the election of its president. Traditionally, the EU has nominated the president of the IMF while the United States has nominated the World Bank president. The effectiveness of world institutions will depend on their openness to better representation of other major world powers.[101]

Multinationals and Trade

What is the role of global or multinational corporations in trade? Corporations have been growing in size since the beginning of the twentieth century, partly for reasons of efficient management, partly because tax laws encouraged corporations to retain profits rather than distribute them to shareholders, and partly because of technical developments in transport and communication. These same factors encouraged corporations to operate abroad through tightly or loosely managed subsidiaries, or through joint ownership and more truly global enterprises. In global enterprises, the advertising and operating style of some management and staff members tends to reflect the cultures of the host countries. It is simply better business. Countries have not been shy about inviting foreign firms to act as key companies in regional development projects. And competing multinational companies also tend to follow one another into new foreign markets, or into other countries' resource developments.

Foreign corporations working in mining or other industries have been strongly criticized for polluting, as well as for exporting a client country's assets and profits of production. And, in fact, the costs and benefits of such projects need to be carefully negotiated by countries hosting foreign corporations. Because of their size and expertise, though, global enterprises may be more successful as negotiators than the government of the host country in question. Sometimes, a corporation may also have the bargaining advantage of being able to move its production to another country that offers better terms.

As already discussed, foreign investment in developing countries can provide missing capital and skill training; it can also create jobs. As well, foreign investment can raise the host country's tax revenues; it may also improve the balance of trade in goods and payment flows. Furthermore, technology transfers do tend to occur mainly through private investment, although the transfers are often limited by the investing company's patent protection, which covers the cost of their research and development. Patenting does encourage research, but everyone benefits when new knowledge and goods are made broadly available to people after a minimum time period. The Internet is an example of new knowledge that was made freely available.

More than half of all international trade takes place within global enterprises. This means that sales are not organized through market exchanges, but through a command system of accounting prices decided within the corporation. Furthermore, global enterprises and large international fund investors undertake international financial and currency transactions to reduce their risk in the currency exchanges they must make in their worldwide business. Global corporations may also have financial subsidiaries directly engaged in financial activities. Naturally, moves in international payments can be a factor in financial crises. Regulating international financial transactions equitably remains an issue for world financial stability.

The World Bank, in its recent IFC reports, has been evaluating the approaches of different countries to business regulation in order to ensure that countries understand and learn from others what best-practice business regulations actually look like. Particularly for developing countries, the simplifying of regulations, registering of people's rights to their property, and adjusting business taxes are ways of making it easier to start a local business or attract international investment. And both, of course, help to create jobs.[102] Small business start-ups would otherwise face long bureaucratic delays and complex regulations, as well as ill-defined property rights to homes or places of production. On the other hand, powerful corporations and their governments have been known to pressure poor countries to change their regulations in ways that favour foreign trade rather than domestic production.

The unrelenting criticism of business seems to increase with the size of the corporation. There is no question that power and competition in a world economy increase the likelihood of asocial behaviour by corporations. Economists such as Gardner and Means have postulated that because corporations were large and powerful they needed to be given a clear social role.[103] Others have agreed with them. Indeed, recent corporate advertising has emphasized the social benevolence of large corporations. However, still others would argue that civil society and governments, not corporations, should make social choices. Corporations, they say, exist under laws created by governments. These corporations are expected to act within the spirit of the laws and regulations that govern them. But world corporations in developing countries can have production and annual incomes larger than the production and annual income of the country in which they are operating. As yet, however, no international organization regulates the global operations of corporations.

Summary

This chapter explored some aspects of international production and exchange in a global economy managed by independent nation states with different currencies. We discussed how differences in national power affect trade relations, and how such differences affect economic development and growth both in countries that were early industrializers and in countries that are just beginning the process. We reviewed the activities of international organizations relative to trade and investment, as well as those that are intended to balance the international financial system. We discussed, too, the need for countries to keep their international payments, over a medium time period, moving toward rather than away from balance. Finally, we considered the role multinational or global corporations play in trade, payments, and foreign investments, as well as the ways in which the power of their home countries may matter to the success of their global operations.

But relationships between countries tend to change over time. Countries that were once clients of industrialized countries during periods of colonization or war slowly became industrialized themselves. And today, their products compete with those of countries that industrialized earlier. At least this has been the pattern in the United States and Japan, to name but two examples. It is likely that countries such as China, India, Russia, and Brazil that are industrializing today will follow the same path. If they do, their economic prosperity would mean a rise in wage levels comparable to those found in countries that industrialized earlier. Moving toward a more equitable sharing of income in the world may just be possible.

The next and last chapter, *Individuals in Society,* explores ways of understanding individuals—of understanding their relationships with their families, their social groups, and the government of the countries in which they live. In short, what are the links between the economic activities leading to innovation and growth that we have been discussing and the activities of individuals in society?

Besides the good that is simply object of desire, there is the good of order. Such is the polity, the economy, the family as an institution . . . The good of order is dynamic, not merely in the sense that it orders the dynamic unfolding of desires and aversions, but also in the sense that it itself is a system on the move. It possesses its own normative line of development, inasmuch as elements of the idea of order are grasped by insight into concrete situations, are formulated in proposals, are accepted by explicit or tacit agreements, and are put into execution only to change the situation and give rise to still further insights. Still this normative line provides no more than a first approximation to the actual course of social development . . . social development would be simply a matter of intellectual development, if the human psyche were without its contribution; but in fact man's sensitive nature constitutes both the dynamic materials to be ordered and the subjective conditions under which the order is discovered, communicated, accepted, and executed. So it is that social order finds in the desires and aversions of individuals and intersubjective groups both an enormously powerful ally and a permanent source of egoistic and class deviation . . . However . . . concern with the ideal involves a transposition of the issue from the level of the policeman and the court, of diplomacy and war, to the level of culture and morality . . .

Marx looked forward to a classless society and to the withering of the state. But as long as there will be practical intelligence, there will be technology and capital, economy and polity . . . What is both unnecessary and disastrous is the exaltation of the practical, the supremacy of the state, the cult of the class . . .

– BERNARD LONERGAN

Chapter Eleven

INDIVIDUALS IN SOCIETY

How Are They Related?

So far, the fundamental question weaving its way through the story of economies and economics has been: But what is a person's relation to the economy, the state, and society in general? And people have given different answers to that question. Most mainstream economists analyze the economy in terms of how an individual makes his economic decisions. His or her choices are limited by the constraints of the production and market processes; that is, the more or less limited possibilities the individual has to produce and exchange so as to satisfy his or her needs and wants. However, economists usually understand that people do take into account other factors such as family; the law and regulations; and whether a given purchase, sale, or work decision fits or supports their other human values.

Economists recognize that the market system helps individuals to sort out what particular goods and services to produce. Economists recognize, too, that governments and civil organizations produce public and social goods and services, and also redistribute income through the tax system and private philanthropy to supplement the market economy. After all, the goal is production that is more efficient and of benefit to more people.

Indeed, mainstream economics is based on the democratic notion that individuals are free to choose their work, as well as the goods and services they produce or buy in the market—limited, as we have seen, by their capabilities and functioning as well as their income. Mind you, some critics of market economics understand this emphasis on a person's freedom as a denial of an individual's family and community responsibilities.

Some critical realist economists take a rather different position on the balance between individuals and society. They consider both important, putting equal weight on individual economic action and on the social structure. They would take a middle course between voluntarism (where social structure is reduced to a creation of individuals) and determinism (where human activities are limited by a coercive social structure). For these critical realists, social structures include language, the market, money, and morals. Jochen Runde, a professor of economics at Cambridge University in England, in his article about bringing social structure back into economics, argues that social formations, which exist and endure independently of the beliefs of any individual in the society, form the preconditions for successful human action.[104] Although these economists do not discuss the question of how change in society is initiated, the importance of social formations seems primary.

Friedrich Hayek puts more emphasis on the freedom of individuals. His notion of individualism holds that people, if left free, will often achieve more than one person could design or foresee. He described the fundamental attitude of individualism as one of humility toward the processes by which mankind has achieved things that have not been designed or understood by any one individual and are, indeed, greater than individual minds. For Hayek, society is greater than the individual only in so far as it is free.

Hayek qualified individual action as requiring "a proper insight into the limits of the effective use of individual reason in regulating relations between many reasonable beings." People's capacity to think is not a natural endowment of the individual, he says, but a cultural heritage; not transmitted biologically, but by example and teaching. He argued that individualism affirms the value of the family and of all the common efforts of the small community and group. As well, it affirms local autonomy and voluntary associations. Hayek thought that individual actions in the economy should intend justice and well-being for others, but individuals cannot account for how the "impersonal process of the market allocates command over goods and services to particular people. . . because the results are not intended or foreseen, and depend on a multitude of circumstances not known in their totality to anybody."[105]

For Hayek the choice was clear. People either accept the freedoms, risks, and demands of a market economy, or they obey a government's economic planner. Hayek believed that an individualist order must rest on the enforcement of general laws, rather than on the enforcement of specific orders. Government, he said, should be confined to making its individual citizens observe principles that they know and can take into account in their decisions. For Hayek, the state provides a framework within which the free collaboration of people has the maximum of scope.[106]

The Canadian political philosopher Ronald Beiner, in his book *What is the Matter With Liberalism?* criticizes liberal theorists who are "complacent about the practices in a liberal society" instead of being "relentlessly critical of the (liberal society's) communal understanding."[107] For Biener, the liberal theorist's role is to make judgments about the life of a society and confront the styles of living that are unseemly. However, he contends that it is up to the politicians and the people they serve, rather than the political theorist, to propose actual changes. For Biener, the political theorist can "articulate why contemporary societies will be in serious trouble" unless the practice of citizenship is reshaped to meet the social challenges. But putting theory into practice depends on people's judgment in a particular situation. And that depends on prudential judgment rather than knowledge of theoretical principles. However, Biener sees that a liberal society that has lost its ethos of liberal morality may not continue to be a liberal society for long. Although he does not draw the clear distinction between liberal and socialist thought and their social outcomes that Hayek did, he nevertheless finds flaws in political thinking that privileges community over the individual. He prefers to see communities, including political or civic communities, as both places chosen by individuals for membership therein, and as communities, civic and other, that we are all born into.

Individuals, in fact, usually belong to many groups, beginning with their family; they are never completely defined by any one group. Furthermore, groups are not static; they evolve, change, and disappear—to be replaced by new groups. Moreover, members of a group do not all have the same experience, understanding, and judgment. They can, however, learn from one another and act together as a group in whatever ways they choose. In a complex society, an individual cannot know all there is to know. People can, though, become knowledgeable in certain areas, which will be of benefit to both themselves and others. Through such collaborations, a democratic society can acquire the information it needs to understand issues and reach judgments about appropriate actions or changes that are needed.

Democratic ideals spring from the basic principles of individualism. The whole justification of democracy rests on the fact that, in the course of time, what is today the view of a small minority may one day become the majority view. Too often, the majority may prefer the status quo, or the way things are, when costly changes may be needed. On the other hand, when individuals and groups are free to compete in presenting their views, new ideas have a chance to prevail.

Hayek Reviews Western Thought

In both of his works, *Studies in Philosophy, Politics and Economics* and *The Principles of a Liberal Social Order*, Hayek reviews the development of Western thought as it affects individuals in society.[108] The liberal tradition that asserts the primacy of the individual goes back to thinkers such as Aristotle and Cicero in classical antiquity. Western philosophers developed ideas about the relations of individuals to society still further.

Until the eighteenth century, certain observed regularities in human affairs that were not the product of design were regarded as *natural*. Medieval scholastic philosophers such as Molina developed this insight into the notion of *natural law*. Natural law was understood to mean that what is commanded or forbidden depends on the nature of the case and not on the arbitrary will of the legislator. British moral philosophers of the eighteenth century, such as Adam Smith, started from the theory of common law and natural law to build up a social theory that had the unplanned results of individual action as its central object and, in particular, provided a theory of the spontaneous order, or *invisible hand*, of the market.

Later philosophers abandoned the whole idea of natural law as something given by the nature of the case.[109] Hayek criticized the English utilitarian philosophers who emphasized the rationality of people's economic behaviour. He found that their notion of individualism was "blind to the forces of historical evolution." The utilitarian philosophers argued that a social order could be designed by individual human reason, and that law is created by the state and can be changed by the state. But for Hayek, the social order is an evolving system: "The crucial fact of our lives is that we are not omniscient, that we have from moment to moment to adjust ourselves to new facts which we have not known before, and that we can therefore not order our lives according to a preconceived detailed plan in which every particular action is beforehand rationally adjusted to every other."

Hayek defended Adam Smith and the classical economists, saying that they did not invent *economic man* and did not assume strict rational behaviour or false rationalistic psychology. He thought that Smith's chief concern was not so much what man might occasionally achieve, but that he should have as little opportunity as possible to do harm when he is at his worst. When writers of the eighteenth century used the terms *self-love* or *self-interest,* they were not referring to egoism or concern only for the immediate needs of the individual. Their *self* included family and friends and whatever a person cared for.

In summary, what economists understood was that the market, as it had developed, was an effective way of letting people participate in a process more complex and extended than they could fully grasp. Each individual uses his special knowledge and skills to further the aims about which he cares. If people have a limited area of responsibility, the harm that the results of their action might cause others is limited by the relative importance of what they can achieve. In short, planners, bureaucrats, and dictators have large areas of responsibility and may, as a result, do a great deal of harm.

Economics Is Not a Natural Science

In his articles on *Scientism and Society*, Hayek explained how the importance of the natural sciences in the nineteenth century skewed the development of the human sciences because of the dogmatism about applying the methods, rather than the spirit, of the natural sciences to the study of the human sciences of psychology, economics, politics, anthropology, and sociology.[110] Lonergan, too, saw the need for a different method in the human sciences. Although the human sciences are empirical, they also need to be critical.[111] Milton Friedman, however, drew attention to the similarities between the methods in the natural and social sciences although they deal with different kinds of data.[112] As a human science, economics is about both the technical relations of the variables in production and finance, as well as the behaviour of people acting in the economy. Human scientists count on explaining not only the objective economic or social processes studied, but also how the actions of human beings affect those processes for better or for worse. As Lonergan explains, people's actions in a given situation are the result of their experiences, understanding, judgment, decisions, and biases. Creative change depends on knowledge of the situation, new insights about possible directions of development, and the ability to persuade the other people concerned.

Perhaps because they wish to emulate the methods used in the physical sciences, economists and other social scientists have tended to avoid normative considerations. They distinguished between *positive economics*, which studies the data, and *normative economics*, which studies what might be.[113] In general, economists do positive science. They develop and analyze statistics, and assume that people behave rationally within the constraints of production and market processes.

However, mainstream economics still holds up the theory and mathematical model of the *general equilibrium of many markets* as an ideal of sorts. And the general equilibrium model does seem to be supported by the economic data. As we discussed in chapter three, the general equilibrium model has been extended to include economic growth. In short, new investment responds to a technology shock or to research and development of a new design that, with a production lag, produces more and better consumer or final goods and services.

This growth and development theory has been criticized mainly for failing to account sufficiently, first, for the effects of changes in money that do occur, as we saw in chapters five and ten; and second, for people's economic outcomes in employment and income. As discussed in chapters six and seven, Lonergan's theory of innovation and growth does allow for money surprises that can derail the process unless human behaviour adjusts money flows and income distribution to optimize the economy's potential for growth. These criticisms are about the human side of economics, which considers people's behaviour as economic agents. And as we have seen, human behaviour may reflect a lack of understanding of the growth process or it may reflect people's biases. To better analyze human behaviour, the ongoing development of economics may call for the inclusion of normative questions or collaboration between social scientists and ethicists.

Lonergan on Individuals in Society

While Hayek's views on the place of the individual in society are similar to Lonergan's, Lonergan develops more fully his notion of the individual or person as an agent in society, whether alone or in groups. However, *achieving the good of society* depends on how well individuals live up to their human potential and cooperate with others in their families and social groups. For Lonergan, individuals with shared views, acting alone or together can influence society for better or worse. And certainly, the history of societies has included failures and aberrations as well as successes. But insofar as societies are free, says Lonergan, the errors can be corrected and the successes built upon.

Lonergan bases his notion of the individual on people's capacity for self-knowledge. Such self-knowledge, he says,

> follows upon the affirmation of oneself as a unity of empirical, intelligent, and rational consciousness, upon the heuristic definition of being that reveals intelligent and reasonable affirmation to be knowledge of reality. . . however, such adequate self-knowledge can be reached by man only at the summit of a long ascent. For self-knowledge involves a self-objectification, and before man can contemplate his own nature in precise but highly difficult concepts, he has to bring the virtualities of that nature into the light of day . . . what we mean by a unity of empirical, intelligent, and rational consciousness has to be gathered from our study of insight in mathematics, in classical and statistical science, in common sense and its fourfold bias, in the ambiguity of things and bodies, and in the reflective understanding that leads to judgment. But such a study would not be possible without the development of the sciences and the long clarification of more general issues by philosophic inquiries and debates. Nor would the sciences and philosophic developments themselves have been possible without a prior evolution of language and literature and without the security and leisure generated by technological, economic and political advance.[114]

Lonergan explains, here, his notion of human, social, and cultural development throughout history. That development, he says, cannot begin for mankind or individuals until they have acquired some security and leisure through their economic and political base: a sense that they can learn, understand, and act—alone and with others. Finally, through the development of stories in literature, and through studies in philosophy and science, individuals and mankind can advance to what Lonergan calls their *self-objectification,* or a full sense and use of their ability to learn and thereby come to know reality.

Lonergan discusses four kinds of bias in human understanding and activity that limit our possible self-knowledge. First, is the psychic failure that censors experiences before they become conscious.[115] Second, is the more conscious failure of an egoism that does not consider the interests of other people. Third, is the group failure that occurs when groups of individuals pursue the interests of their group but exclude the interests of others in the community. Finally, there is the failure of a whole society that concentrates on its short-term benefits and overlooks the long-term costs of issues that have to be addressed.

Societies fail, says Lonergan, when people tend to simply accept the way things are, or the *status quo*, and get on with their immediate needs and pleasures. Of course, acting alone or in groups to create new social organizations or new patterns of living may be costly and unrewarding. State, class, or economic rigidities in a society often work against initiatives that could lead to social development. However, many individuals and groups have risen to the challenge of development. Examples of past achievements of creative minorities include the outlawing of slavery in different countries, and the building of the European Union after the twentieth century's disastrous European wars, to name but two.

Lonergan distinguished two kinds of social relationships. The first covers what he calls a person's *intersubjective* relationships with family and friends. The second covers the *state, economy, and civil community* relationships that developed historically from spontaneous, unexamined relations with family and friends. These formal social organizations of the state, the economy, and civil society could establish conventions and laws, which extended to larger communities the technical developments and new forms of money in market production and exchanges. States with their civil and economic institutions could link smaller groups for larger projects, whether for a country's infrastructure (water and roads), social well-being, national security, war, or international cooperation.

Civil communities have developed through the initiatives of individuals and groups until their structures pervade almost all human interactions. As a result, individuals in their behaviours respond not only to their personal or small group concerns but also to what is needed to ensure the continuity and development of civil institutions. They understand that satisfying their needs and wants depends on the continuing cooperation of others in the economy and polity.

The Good of Order

Lonergan calls that successful operation of the economy and state *the good of order*. He explains: "This good of order is not some entity dwelling apart from human actions and attainments. Nor is it any unrealized ideal that ought to be but is not."[116] People, he says, devise economic and political arrangements for human living, and when these are understood and accepted they offer the good of order. These patterns develop for better or worse through the actions of individuals and their groups.

But war and revolution can destroy the good of order. For example, the French Revolution dramatically put an end to the French king and queen, and after a short, rather chaotic time, members of French society accepted Napoleon as their emperor. Or take the war in Iraq, which has led that country toward civil war. Such examples suggest that once destroyed, the patterns of civil relationships are hard to rebuild. Indeed, Lonergan used the fall of Rome to illustrate how, when the institutions of the state crumble and economic and political arrangements break down, people must depend on their intersubjective extended family groups. To survive, these groups have to produce their own food, shelter, and security. Clearly, as we know from both history and recent events, economic, political, and social decline does happen.[117]

Although Lonergan explains the good of order as the patterns of cooperation that, in fact, exist, developing more worthwhile networks of cooperation in society remains a challenge. He sees that people in their freedom are able to acquire skills and learning in some area, and to grow in sensitivity and responsiveness in their social relations with more or less capability and success. As he puts it: "The human good is at once individual and social. Individuals do not just operate to meet their needs but cooperate to meet one another's needs. As the community develops its institutions to facilitate cooperation, so individuals develop skills to fulfill the roles and perform the tasks set by the institutional framework." [118]

Nevertheless, Lonergan understands that cooperation within the institutional framework does not just serve man, but also accounts more for "the making of man, his advance in authenticity, the fulfillment of his affectivity, and the direction of his work to the particular goods and a good of order that are worth while."

But the ways in which people cooperate in society evolve slowly, "for change, as distinct from breakdown, involves a new common understanding and a new common consent." [119]

The well-known American political philosopher, Michael Walzer, has discussed the possibility of an *international good of order* in his article *Governance and the Globe*. He outlines seven possibilities, ranging from a global state as a unifying solution, to the anarchy of independent sovereign states. He defines our current world situation as one step away from anarchy with states surrendering some sovereignty to the international organizations of the United Nations and to some regional organizations such as the European Union.

Walzer's principal worry is the likelihood of global tyranny in a world state system. He sees that problems in a world federal system would arise from the world state's political efforts to order both the variety of worldviews or cultural pluralism, and the material inequality that exists in the uneven distribution of the world's natural resources. In the end, Walzer calls for a strengthening of our international non-state organizations like the U.N. and its developing array of world institutions which, he argues, already offer "opportunities for political action on behalf of peace, justice, cultural difference, and individual rights." But to preserve the freedoms that such a minimal global state permits, Walzer calls for "the widest engagement of ordinary citizens" to make it work. [120]

The Good of Order in Production and Distribution

The economic goal of any producer is to provide goods and services that have an economic value because they are scarce and in demand. Ideally, producers sell what they produce at a market price that is without external interference or repression, such as price controls or market monopolies.

Survival in the economic life of corporations, governments, and other producers, depends on covering costs and supplying the investment funds needed to continue to produce. Survival may indeed depend on producers' ability to innovate and grow. These goals are fundamental. To achieve them, producers create an environment that attracts and keeps people to help them. As better people tend to be better employees, producers may try to respond to their employees' broader life goals. But meeting their organization's economic goals is primary and can be very challenging.

In an economy that is moving toward a global market, or is required to internalize some of its pollution costs, the production and market environment may demand many production changes. Indeed, finding the right balance between seeking human development and excellence and achieving the narrower cost and profit goals of the corporation may be difficult. Yet broader human goals remain important; optimizing production possibilities and society's well-being depend on the development of the people involved in production.[121] As we saw in chapter seven, the view of Paul Romer and other economists is that human capital development is crucial for economic development and growth.

Because people are central to achieving economic goals, decisions about the distribution of the benefits of production are also central to economic goals. While markets are the best way to organize production, as we have seen, they do not always result in a socially acceptable distribution of production income. Chapter seven on *Incomes and Prices in Economic Growth* argued that a better understanding of the innovative growth cycle would allow a particular investment expansion to level off as profits fall, while simultaneously extending production, employment and income so that as many as possible benefit from the higher standard of living. Government and non-profit production can also help to correct market income distribution. And production income can be supplemented by public and private redistribution through the tax system and philanthropy.[122] Through education, public health, and other social and personal services, redistribution can ensure future economic goals as well as broader human goals.

Our discussion of economic values has taken account of values that go beyond a narrow definition of the behaviour of *economic man*. As Lonergan explained, the vital values of nourishment, shelter, and a capacity to produce constitute the necessary bases for the higher values of the social good of order, of culture, and of personal freedom.[123] Although Lonergan distinguishes between levels in his scale of values, the integrity of each level is retained and extended as people seek higher values. Food and other basic needs remain essential as we expand our learning, skills, or friendships. Lonergan understood that finding the good in theory or in practice would demand the collaboration of both scholars in research, debate, and dialogue, and of us all in the networks of our living in political, economic, and social communities and smaller groups.

Summary

This chapter explored various ways in which individuals can interact with their family members, social groups, national states, and the world community. Some thinkers believe that the leaders or experts who create a blueprint or program for people to follow can engineer the good society. Social philosophers such as Hayek, Walzer and Biener however, point out that such an approach may well lead to the repression of individual initiatives. History has shown us that economic planners tend to rely on authoritarian governments that easily became repressive. Hayek looked to individuals and their groups, working with knowledge of a particular situation, to create social improvements that would respect the achievements of others and of previous historical periods.

For Lonergan, the social good is the good of order that actually exists in the economy, society, and culture. But social change is the norm. Creative social change, Lonergan argued, relies on individuals who acquire a more or less objective, or scientific, grasp of the way they understand, judge, and decide in their lives. He states that individuals can best work toward social change through groups of like-minded people, who act as creative minorities with more or less influence. In societies that are democratically organized, such minorities have the freedom to emerge and persuade others within the broader community of their ideas. Improving society, for Lonergan, cannot be done through an authoritarian or bureaucratic approach.[124]

Our increasingly global societies and economies are still divided into more or less independent nation-states. The world also consists of different great cultures and religions. The hope is that the growing possibilities for communication will increase the dialogues, while decreasing the confrontations demanded by traditional stances and viewpoints. It is a huge challenge for people to understand their differences and work toward a creative dialogue. Indeed, have we even now achieved a sufficient measure of self-knowledge to understand how we learn, understand, verify, and decide in order to meet these challenges? Clearly, insofar as we can succeed in limiting our biases and increasing our capacities as intelligent and caring human beings, we can decrease the probabilities of social decline.

In this final chapter, we saw that a person's relations with other people are crucial to his or her human development, but that individual liberty or freedom is also fundamental to social relationships. Of course, people's actions, individually or in groups, can be negative *or* positive for the future. One need only think of repressive governments or institutions that leave virtually no room for individual initiative. Change then becomes impossible, apart from heroic actions by people who risk their lives to dissent. Still, in any society, individuals may be biased in the way they understand, judge, and choose within their social activities because of unexamined prejudices, egoisms, and narrow group beliefs. Or they may simply be unwilling to act when some action is called for.

To sum up, an individual's relations with society can be best understood in terms of the process of social change. History shows us how social progress and decline have occurred in the past. The way forward, then, is through individuals, alone or acting in groups, who initiate change in large social institutions such as governments or corporations. One example discussed in chapter ten was the evolution of approaches to development undertaken by international institutions. These institutions create the good of order that we have set up to respond to world development needs. The U.N. institutions operate globally despite the competing interests of their powerful member nations, their traditions of appointed leaders, and their unbalanced representation of the world community. But change has come, however slowly, in these world institutions, and it has come as a result of external proposals and criticisms made by individuals and groups; through the experiences of the institution's own staff in various developing countries; and, at times, through changes in structure and leadership.

In communities with civil and political institutions and an economic base, individual and social development is best enabled in a democratic environment. Then, individuals and cooperating groups can build and maintain institutions and activities that promote both social and human development. When changes are introduced democratically, and in ways that preserve individual liberty and civil institutions, the scope of the social harm will be limited and more quickly corrected. Moreover, it may be possible for other countries to adapt, or imitate for themselves, the successful economic and political initiatives undertaken in other communities.

APPENDIX ONE

Lonergan's Baseball Diamond

A Very Elementary Game Play

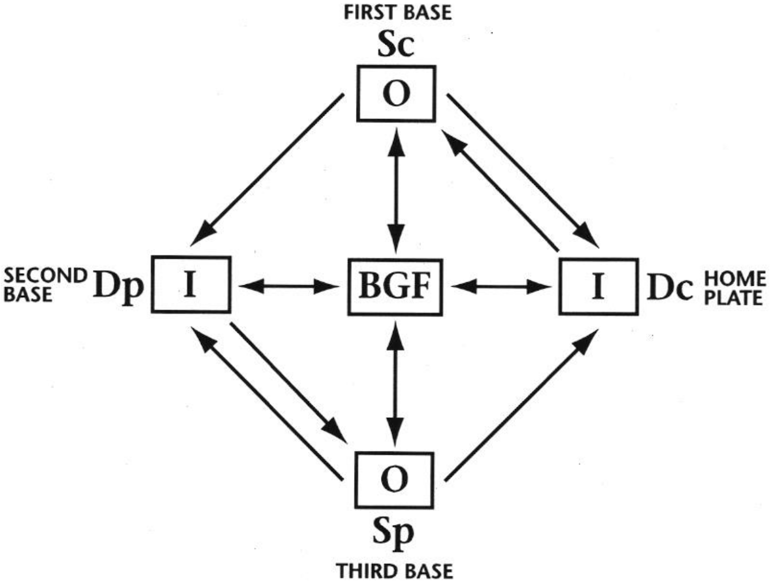
Lonergan used his baseball diamond diagram (see Figure 1) to illustrate the changes in output and income flows, prices, and distribution of income during innovation and growth, processes so characteristic of the free, mixed economies of the world.

In many ways the economy is a game with competition, risk, and uncertainty, as well as winners and losers. In mixed economies, societies through their governments often compensate losers, helping them to re-enter the game. The economic game, then, is like baseball, in the sense that the pitcher adds money to enlarge the game in response to the readiness of players to innovate and grow (bat and run, or pitch and catch the ball).

The circuits denote stages of production with new capital goods (including newly capable people) being installed first in order to produce the new or better consumer goods and services that raise the standard of living.

Think of Sc in Figure 1 as home plate. Think of the pitcher throwing in new money. The entrepreneur bats the ball, thus making new outlays (O); these send new income (I) to demand, where people spend it to live (Dc) or to buy equipment and skills (Dp).

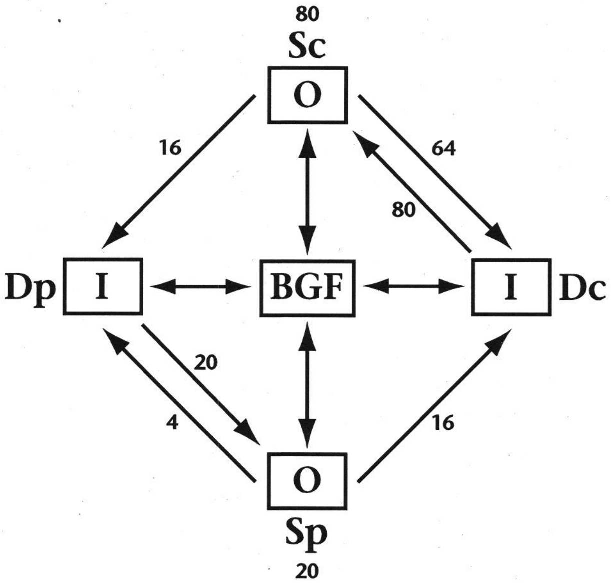
FIGURE 1 – THE BASEBALL DIAMOND



Sp = production and supply of producer or capital goods and services
Dp = investment income and demand for capital goods and services
Sc = production and supply of consumer goods and services
Dc = consumption income and demand for consumer goods and services
BGF = the (now international) financial system and the government and banking institutions that are the sources of new money that may be *pitched* into the economy.

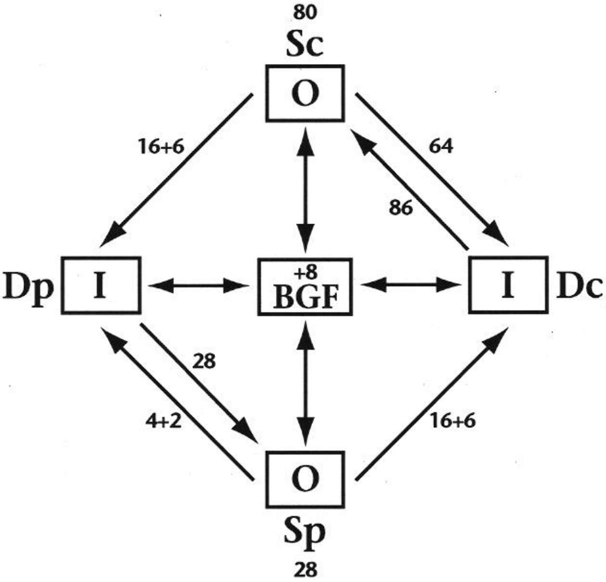
O—I in both the capital (surplus) and consumer (basic) circuits represent the money outlays of producers (O) that become incomes (I) for their suppliers, workers, managers, and owners of stocks and bonds (who are owed interest and dividends). Some of that income is saved and invested, being directed to surplus demand (Dp). But most of that income is spent on people's standard of living, being directed to consumption demand (Dc). Such a functional division of income flows explains the crossovers from production in one circuit, which in turn create a demand for production in the other.

FIGURE 2 – A STATIONARY ECONOMY



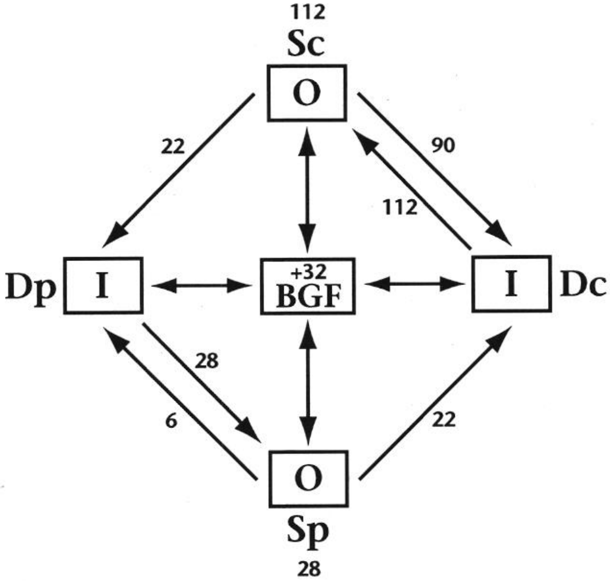
In the largely theoretical **stationary state** of an unchanging economy (see Figure 2), the flows within and between circuits are constant. Consumption represents 80 percent of the economy and investment 20 percent. In this simple example, we will take 80 and 20 as the initial output indexes. Note that there is no flow of new money into the economy. To keep the innovation and growth story simple, we assume that the economy is operating at its full potential.

FIGURE 3 – A CAPITAL PRODUCT EXPANSION



In this simple example, the **capital or surplus expansion** (see Figure 3) is initiated by the new funds pitched to capital goods production for new designs. It may start in one firm or industry but usually spreads to many. In this example, the overall expenditure on new capital goods increases to a maximum of 28. Outlays (O) and incomes (I) increase creating new consumption and investment demand. However, there is still no increase in the real output of consumer goods because of the "time to build" lag. So the prices of consumer goods rise with the increased demand. And the ratio of production of capital goods to consumer goods is 28:80 or about 1:3, instead of 1:4. At some point in the surplus expansion, the limits of production are reached and a further flow of money would only create a price bubble.

FIGURE 4 – A CONSUMER PRODUCT EXPANSION



In the normal **consumer or basic expansion** (see Figure 4), new production is made possible by new money flows to supply (Sc). In this example new money to produce consumer goods rises eventually to 32. Outlays of producers (Sc) become income and expenditure flows between supply (Sc) and demand (Dc and Dp) as the innovations and growth made possible by the surplus expansion are incorporated in the production of consumer goods. Those production increases spread from firms and industries to the whole economy. As the production of new and better consumer goods grows toward its limit, profits and prices for consumer goods fall to normal levels from their highs in the surplus expansion. Production in the surplus or capital (Sp, Dp) circuit remains unchanged so that the level of replacement capital production is sufficient for the larger economy. Proportions between producer and consumer goods return to their long-run relationship of 1:4 as the production of goods for the standard of living rises from 80 to 112. The transition of innovation and growth is complete for the time being. Recall that the stationary state is largely a theoretical notion.

Thus in the successful innovative growth process, circuit growth peaks first in capital or producer goods production and later in consumer goods production. The crossovers of the baseball diamond (between first and second and between third base and home) grow during the expansion of capital goods and become steady during the consumer goods expansion. The crossover between third base and home is the demand for consumer goods created by the growth of incomes during the capital goods expansion. The crossover from first to second base is the demand for new producer goods created by the profits of consumer goods production that encourage its growth.

The baseball analogy draws attention to the dynamic structure of innovation and growth as well as to its indeterminacy.[125] Players active in production, finance, and consumption need to understand the game's dynamism if they are to throw the balls to complete the circuit of play around the bases, thereby raising the score for everyone.[126]

APPENDIX TWO

Social Science Courses on Economic Issues in the Liberal Arts Program of the Thomas More Institute, Montreal 1991-2007

06-07 THE MIDDLE EAST IN TRANSITION. How have the Ottoman Empire, the colonial experiences after WWI, and the importance of oil in these countries shaped their institutions, economies, and cultures.

05-06 POINTS OF ENCOUNTER: BERNARD LONERGAN & KARL POLANYI ON ECONOMICS. Were Lonergan and Polanyi headed in the same direction at about the same time? What are the relations between a society's political and economic institutions?

04-05 ECONOMIC JUSTICE: *Mirage or a Question of Method?* Economics can be understood as the study of the dynamics of producing and distributing what people need and want. Are these dynamics morally neutral? Is it possible to have a morally progressive blend of competitive and cooperative factors?

03-04 DREAMS OF WEALTH: *From the East India Company to WorldCom.* What have local and multinational corporations contributed to social and economic development? Should large corporations be given a social role?

02-03 LIFE IN THE WORLD ECONOMY: *Responding to Globalization.* What can classical economists like Smith and Mill and contemporary scholars tell us about profits, international trade, and social creativity? (The PBS series "the Commanding Heights" was viewed.)

01-02 WHAT IS THERE TO EAT? *Food in History, Cultures, and Economies.* I *Early History/Modern Crises,* II *Food for the World/Cultural Diversity.*

00-01 WHAT IS THE "NEW ECONOMY" AND WHAT DOES IT MEAN TO CANADIANS? Have we now entered into the Third Industrial Revolution, where technology and knowledge are the key factors of production?

THE NATURE OF ECONOMIES. Why are economies not more stable? What roles do governments and culture play as economies become more globalized?

99-00 POVERTY AND INCOME DISPARITY: I. *The Income Gap Within Rich Countries;* II *The Income Gap Between Countries.* In discussing the successes of globalization, the opening of new trade markets, and the fast technological advances, do we think of the downside? Is there a risk that the widening gap between rich and poor is seriously weakening our national and international communities?

98-99 BENIGN BEHEMOTHS? EUROPE AND THE AMERICAS: *Peoples, Nations, and Regional Integration.* How do the NAFTA , Mercosur, and bilateral trade agreements, as well as regional integration in Europe, limit sovereignty and change national and international policies?

97-98 IS GLOBALIZATION OUT OF CONTROL? *Understanding economic and cultural transitions:* I *Medieval/Modern – Industrialization/Colonialism;* II *Global Economy/Multicultural Society.* What patterns can we learn from earlier epochal changes in our history to understand both the economic issues of technology, production, and trade and the social issues of work, family, and migration that we now face?

96-97 SOCIAL VALUES IN A GLOBAL ECONOMY: I *The Good Society;* II *The Global Economy.* How will personal and social needs change as civil society adapts to a world economy. How will national economies adapt to changes in trade and to doing business in different cultures?

95-96 MEETING MODERN CHINA. What does Chinese economic growth mean for the increasingly interrelated global economy? How has that economic growth changed Chinese social and cultural life?

THE COMPLEXITY OF DEVELOPMENT: *Islamic Culture and Modern Turkey.* Have mainstream approaches to economic development failed to take account of the complex social interactions that affect production, distribution, and finance? What is the role of the state in development?

94-95 WORLD CULTURES AND MARKET ECONOMIES: I *Central Europe;* II *Asia.* Why are some market economies successful while others are not? What do we need to know about cultures and institutions to understand how an economy works?

93-94 ECONOMIC TRANSFORMATIONS: *Discerning the Future.* To explain the present transition to a global economy, this course takes an historical and cultural perspective to consider significant economic transformations of other times and places. What, then, was the balance between the society, the state, and the economy? What was the balance between the local and the world economies?

92-93 WORLD TRADE: THE POLITICS AND ECONOMICS OF COMPETITION AND COOPERATION. How will Canada adapt production to world trade? How competitive are we in a world business environment? Will we have to redefine our social programs as our economy changes?

91-92 COORDINATING ADJUSTMENTS IN THE EMERGING WORLD ECONOMY. Why famine in Africa? Disarray in Eastern Europe? Hamstrung reforms in Latin America? Manufacturing miracles in East Asia? How important are geopolitics, international debt, income distribution, civil institutions, and resources in each case?

NOTES

Notes for the Preface

The epigraph text is from Bernard Lonergan, *For a New Political Economy,* Vol. 21, Collected Works Edition, edited by Philip J. McShane (Toronto: University of Toronto Press 1998) 11, 4, 7.

Notes for Chapter One *What is an Economy?*

The epigraph text is from Bernard Lonergan, *For a New Political Economy,* 11-12. Lonergan's general definition of exchange is "a mutual transfer of property rights." Ibid. 30.

[1] Robert L. Heilbroner, *The Making of Economic Society* (New Jersey: Prentice Hall Inc. 1972), Introduction viii; 21-25.

[2] George Dalton, editor, *Primitive, Archaic and Modern Economies: Essays of Karl Polanyi* (New York: Doubleday Anchor Book, 1968) xiv. Karl Polanyi discussed economic relations in early economies in terms of reciprocity within kinship groups. He argued that friendship, status, and hierarchy are social elements expressed in economic transactions.

[3] Immanuel Wallerstein, *The Politics of the World Economy* (New York: Cambridge University Press 1984), Reciprocal Mini-systems, 148-150.

[4] M. Bruce and E. Cran, *Working Together: Two Centuries of Co-operation on Prince Edward Island* (Charlottetown: Island Studies Press 2004); The cooperative movement in Canada is also discussed in Darlene O'Leary (Ph.D. dissertation, St. Paul University, 2006); Moses Coady, *Masters of Their Own Destiny: The Story of the Antigonish Movement of Adult Education Through Economic Cooperation* (New York: Harper & Brothers 1939).

[5] J. N. Postgate, *Early Mesopotamia: Society and Economy at the Dawn of History* (London, U.K: Routledge 1994) 197-205.

[6] Michael McCormick, *Origins of the European Economy: Communications and Commerce AD 300-900* (Cambridge, U.K.: Cambridge University Press 2001) 83-119.

[7] M. I. Finley, *The Ancient Economy* (London: Chatto & Windus, 1975), Chapter 6, The State and the Economy, 150-176.

[8] Monopolistic competition is defined in economic texts as a market in which there are many sellers who are supplying goods that are close, but not perfect, substitutes. Each producer can, then, exercise some effect on prices until innovation changes production or the goods demanded in markets change.

[9] Bernard Lonergan, *For a New Political Economy,* 36.

Notes for Chapter Two *In the Beginning Was Production*

The epigraph is from Bernard Lonergan, *Macroeconomic Dynamics: an Essay in Circulation Analysis,* Vol. 15, Collected Works Edition, edited by Frederick G. Lawrence, Patrick H. Byrne, and Charles C. Hefling, Jr. (Toronto: The University of Toronto Press 1999) 19-22; *For a New Political Economy*, 232-233.

[10] Ray Carey, *Democratic Capitalism: The Way to a World of Peace and Plenty* (Bloomington, Indiana: Author House 2004) 95-134.

[11] *The Economist* (July 28, 2007), 12-13.

[12] Adolphe A. Berle and Gardiner Means, *The Modern Corporation and Private Property,* Revised Edition prepared by the authors (New York: Harcourt, Brace & World Inc. 1968), xvi, 219-243. In the preface to the revised edition the authors note that a body of law is being built up to protect society when private property devoted to production is chiefly in the hands of corporate management.

[13] Friedrich Hayek, "The Corporation in a Democratic Society: In whose interest ought it to and will it be run?" *Studies in Philosophy, Politics and Economics* (Chicago: University of Chicago Press 1967) 302-304.

[14] Joel Bakan, *The Corporation:The Pathological Pursuit of Profit and Power* (Viking Canada 2004).

[15] The size of government in the economy is measured by the Government/GDP ratio.

[16] In Canada, government transfers are currently 12 percent of total income, of which 59 percent is accounted for by Canada and Quebec Pension Plans (CPP, QPP) and Old Age Security (OAS). Alternately, in 2005, individuals received in government transfers $15.54 for every $100 of employment income earned. See Statistics Canada 68-213-XIE *Public Sector Statistics: Financial Management System 2005-2006* , Charts 2 and 3. Federal transfers to provinces and territories is close to 25 percent of federal expenditures. Provincial and territorial transfers to municipalities is currently 17 percent of provincial expenditures.

[17] Statistics Canada *Daily*, Monday, December 12, 2005. When hospitals, universities, and colleges as well as volunteering are included, Canadian nonprofit production in 2001 was estimated to be 7.8 percent of GDP.

[18] Bernard Lonergan in his book *Insight: a study of human understanding* explains how we pay attention to data, acquire insights, and judge. And we act based on the decisions we arrive at after our inquiries. But our inquiries and decisions are also biased by our horizon or how we see the world: our self-centredness, the social groups we move in, and our openness to considering new possibilities and ideas. (Toronto: University of Toronto Press 1992 [1957]). See for example 370-371, and 239-267.

Notes for Chapter Three *Production in Economic Thought*

The epigraph text is from Bernard Lonergan, *For a New Political Economy,* 42; and *Macroeconomic Dynamics: An Essay in Circulation Analysis*, 18.

[19] Aristotle, *Politics* Book 1 translated by William Ellis (London: J.M. Dent & Sons Ltd. 1947).

[20] F.A. Hayek, "The Principles of a Liberal Social Order" in *The Essence of* Hayek edited by C. Nishiyama and K.R. Leube (Stanford USA: Hoover Institution Press, 1984) 374.

[21] Adam Smith, *The Wealth of Nations* Vol. 1 (London: J.M. Dent & Sons Ltd. 1910, 1960) 4-19.

[22] William J. Barber, *A History of Economic Thought* (Penguin Books 1967-1983) 126.

[23] David Ricardo, *The Works and Correspondence of David Ricardo, Vol.1 Principles of Political Economy and Taxation* [1817] edited by Piero Sraffa with the collaboration of M.H.Dobb (Indianapolis: Liberty Fund, 2005) chapter 31 "On Machinery." Added to the third edition of Ricardo's *Principles*, the chapter pointed out that increasing the use of machinery in production would tend to reduce the employment and income of labour. http://www.oll.libertyfund/. Accessed June 2007.

[24] In *Value, Price, and Profit* Marx uses "the word profit for the whole amount of the surplus value extracted by the capitalist without any regard to the division of that surplus value between different parties . . . Surplus value or profit is not income to the landowner, the money-lending capitalist or the employing capitalist who do not produce value. The profit divided among them, for Marx, is unpaid labour. Rent, interest, and industrial profit are only different names for different parts of the surplus value of the commodity, or the unpaid labour enclosed in it, and they are equally derived from this source and from this source alone." http://www.marxists.org/archive/marx/works/1865/value-price-profit/ch.02.htm #c11. Accessed January 9, 2008.

[25] Josef Goldmann and Karel Kouba, *Economic Growth in Czechoslovakia* (White Plains, N.Y.: International Arts and Sciences Press Inc. 1969). The authors apply Kalecki's model of economic growth under socialism to Czechoslovak statistical data.

[26] F.A. Hayek, "The Conditions of Equilibrium between the Production of Capital Goods and the Production of Consumer Goods" in *The Essence of Hayek*, 18-42; 32. What Hayek means by a change in the structure of production is a change in methods of production made possible by a lengthening of the period needed to "put goods in the hands of the consumer." By lengthening the period of production, "we are able to obtain a greater quantity of consumers' goods out of a given quantity of original means of production."

[27] For Hayek, if we exclude goods that we consume, all goods including land and labour that he calls "original means of production" are producers' goods. When original means of production are excluded, he names the remaining producers' goods, intermediate goods.

[28] J.A. Schumpeter, *The Theory of Economic Development* (New York: Oxford 1934).

[29] Leon Walras, *Elements of Pure Economics or The Theory of Social Wealth* (London: George Allen & Unwin 1954 [1874-77]) 380. Quoted in Esben S. Andersen, "The Difficult Jump from Walrasian to Schumpeterian Analysis" (International Schumpeter Society Conference, Kyoto Japan, August 19-22, 1992). "Such is the continuous market, which is perpetually tending towards equilibrium without ever actually attaining it, because the market has no other way of approaching equilibrium except by groping, and, before the goal is reached, it has to renew its efforts and start over again, all the basic data of the problem, e.g. the initial quantities possessed, the utilities of goods and services, the technical coefficients, the excess of income over consumption, the working capital requirements, etc. having changed in the meantime."

[30] Lonergan read F. Hayek, J.M. Keynes, F. Knight, E. Lindahl, H. Pesch, L. Robbins, C.F. Roos, and J.A. Schumpeter.

[31] Bernard Lonergan, *For a New Political Economy,* 109, 231-232; *Macroeconomic Dynamics: An Essay in Circulation Analysis,* 5.

[32] Bernard Lonergan, *Macroeconomic Dynamics,* 5-6; *For a New Political Economy,* 231.

[33] Ibid. 36, 243. "The emergence both of new ideas and of the concrete conditions necessary for their practical implementation forms matrices of interdependence: any objective change gives rise to series of new possibilities, and the realization of any of these possibilities has similar consequences, but not all changes are equally pregnant, so that economic history is a succession of time periods in which alternatively the conditions for great change are being slowly accumulated and, later, the great changes themselves are being brought to birth."

[34] J.M. Keynes *General Theory of Employment, Interest, and Money* (London: MacMillan 1961). Keynes *General Theory,* originally published in 1936 during the Great Depression, pays major attention to the variations in output and employment that result when there are short period changes around a given level of output capacity. In this he differs from the Austrian economists and Lonergan, who consider development as a change in output capacity over time. As Keynes himself states, he is concerned with the levels of employment and income as they are affected by the propensity to consume, the marginal efficiency of investment,

and the cost of borrowing (p.425). There is no room for innovation in his analysis, and investment is a matter of deciding whether or not to replace and maintain the amount of capital equipment currently in use. Keynes looked for ways in which governments can stabilize output, consumption and investment to keep unemployment low. Keynes's analysis continues to influence government policies and economic thought.

[35] Nicholas Kaldor, "The Irrelevance of Equilibrium Economics," *The Economic Journal* 82 (1972) 1237-1245; Michal Kalecki, *Selected Essays on the Dynamics of the Capitalist Economy* (Cambridge: The University Press 1972).

[36] Volume 21, *For a New Political Economy;* volume 15, *Macroeconomic Dynamics: An Essay in Circulation Analysis.* The historical and philosophical basis of Lonergan's economic thought will be explored in Michael Shute's two-volume work, *Lonergan's Early Economic Research* and *Lonergan's Discovery of Economic Science* (Toronto: University of Toronto Press) forthcoming.

[37] Finn Kydland and Edward Prescott, "Time to Build and Aggregate Fluctuations," *Econometrica 50* (1982) 1345-1370.

[38] Paul M. Romer, "Endogenous Technological Change," *Journal of Political Economy* 1990, vol.98, no.5, S71-S102. "There is little doubt that much of the value to society of any given innovation or discovery is not captured by the inventor, and any model that missed these spillovers would miss important elements of the growth process. Yet it is still the case that private, profit-maximizing agents make investments in the creation of new knowledge and that they earn a return on these investments by charging a price for the resulting goods that is greater than the marginal cost of producing the goods."

Notes for Chapter Four *What is Money*

The epigraph text is from Bernard Lonergan's *For a New Political Economy*, 38-39. The word "money" has been substituted for Lonergan's more general term "the dummy."

[39] In 2005 the BDC made 8,500 loans amounting to $2.5 billion dollars. The BDC also offers consulting services to small and medium businesses, and invests venture capital in businesses that want to expand. In 2005, there were seventy-eight venture capital investments, amounting to $118 million.

[40] Robert A. Mundell, *Monetary Theory: Inflation, Interest and Growth in the World Economy* (Pacific Palisades, CA: Goodyear Publishing Company, Inc. 1971), 129.

[41] A good introduction to the economics and politics of money is Frances Hutchinson, Mary Mellor, and Wendy Olsen, *The Politics of Money* (London, Sterling, VA: Pluto Press 2002).

[42] The Bank for International Settlements. www.bis.org/; and www.oneworldtrust.org. Accessed August 31, 2007.

[43] The section on the IMF relies in part on the IMF website at http//www.imf.org, August 1, 2007. See also the Hoover Institution Public Policy Inquiry on the IMF at http//www.imfsite.org/ August 2, 2007

[44] Canada and Italy were added to the group in 1987 when the Louvre Agreement was signed. There is now a call for a Plaza II agreement to encourage the appreciation of currencies that use U.S. dollars as their reserve currency.

Notes for Chapter Five *Money in Economic Thought*

The epigraph texts are from Bernard Lonergan, *For a New Political Economy,* 264; 101.

[45] William J. Barber, *A History of Economic Thought,* 48.

[46] MV = PT. V measures the speed at which money changes hands during a year or another production time period. See also Mark Blaug's discussion of the quantity theory relations between money, output, and prices in economic change and growth in which output changes, and prices change at least temporarily. Mark Blaug, *Economic Theory in Retrospect,* Fourth Edition (Cambridge: Cambridge University Press 1983) 633.

[47] Hume in his correspondence did understand that "the increase of money, if not too sudden, naturally increases people and industry . . ." See Tom Velk, "Hume and Endogenous Money" paper presented at the Canadian Economics Association meeting, Montreal, May 2006.

[48] Marx's labour theory of value is discussed in chapter three, *Production in Economic Thought.*

[49] Ernest Mandel, *Marx's Theory of Money* http://www.internationalviewpoint.org. Accessed February 2007.

[50] Friedrich Hayek, *The Essence of Hayek,* 26-28.

[51] *Forced saving* is the unplanned saving that people do as the prices of the goods they buy rise during the expansion, when the production of consumer goods has not increased to match the increase in incomes. But the higher prices result in profits for producers that can be reinvested to expand production of the scarce consumer goods.

[52] Joseph Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle* (London: Oxford University Press 1934) 101-110.

[53] Robert L. Formaini, *Knut Wicksell The Birth of Modern Monetary Policy,* Economic Insights, Volume 9, no. 1, Federal Reserve Bank of Dallas, http//www.dallasfed.org. Accessed February 2007.

[54] Wicksell saw that in economic development business people invest because their expected profit exceeds the money rate of interest. In other words, the banks' money rate of interest is less than the natural rate of interest. See for example http://www.frbsf.org/publicatiions/economics/letter/2003/el2003-32.html. Accessed December 2007).

[55] Milton Friedman, "Inflation and Unemployment" Nobel Memorial lecture, December 13, 1976.

[56] W.M. Scammell, *The International Economy since 1945* (New York: St. Martin's Press, 1980) 18; International Monetary Fund website www.imf.org. Accessed June 2007.

[57] Thomas J. Courchene, "The Case For A North American Currency Union," *Options Politiques*. http://www.irpp.org. Accessed August 31, 2007.

[58] The central bankers of most countries are happy to hold a world currency as part of their foreign currency reserves. This is an advantage for the governments that print such world currencies. Countries wishing to hold the currency must pay for the money with the excess export of their real resources. This advantage for the country that has a world currency is called *seniorage*.

[59] This section on international monetary policies relies on Robert Mundell, *A Reconstruction of the Twentieth Century,* Nobel Prize Lecture 1999, http://nobelprize.org/nobel_prizes/economics/laureates/1999/index.html. Accessed August 31, 2007.

Notes for Chapter Six *Products that Make the Economy Grow*

The epigraph texts are from Bernard Lonergan, *For a New Political Economy*, 19-21. *Primary rhythms* refer to the production of consumables in the standard of living. *Secondary rhythms* refer to the production of the producer goods that improve and extend the standard of living.

[60] Michael McCormick, *Origins of the European Economy*, 791-798.

[61] Dale Jorgensen, *Jorgensen's Optimization Theory* http://cepa.newschool.edu/the/essays/capital/jorgenoptim.htm. Accessed June 2007.

[62] Finn Kydland & Edward Prescott, "Time to Build and Aggregate Fluctuations" 1345-1370.

[63] Philip McShane's book *Economics for Everyone* (Edmonton, AB: Commonwealth Publications 1996) is a helpful introduction to Lonergan's economics that emphasizes the distinction between the functions of capital and consumer good production in economic growth, their effect on incomes and prices, and the adaptive economic behaviour required for an equilibrium outcome.

[64] Lonergan's equation for the production function is: $k2\ (f2'\ (t-a) - B2) = f1''(t) - A1$. The variables are as follows: $f1''$ is

the rate of acceleration at the basic stage caused by f2′ the earlier rate of production at the surplus stages; A1 is the short-term acceleration at the basic stage due to fuller use of productive capacity; B2 is the rate of replacement investment; (t-a) is a production lag before capital goods affect the production of consumer goods at time t; k2 is the multiplier connecting the new capital production to the new consumer goods production it makes possible. The equation is in Bernard Lonergan, *For a New Political Economy*, 244; *Macroeconomic Dynamics: An Essay in Circulation Analysis*, 37.

[65] Bernard Lonergan, *Macroeconomic Dynamics: An Essay in Circulation Analysis*, 14.

[66] "The division is not based upon proprietary differences. It is not a difference of firms, for the same firm may be engaged at once in different correspondences with the standard of living. Again it is not a division based on the properties of things: the same raw materials may be made into consumer goods or capital goods . . . Similarly, general services such as light, heat, power, transportation may be employed in any correspondence . . . The division is, then, neither proprietary nor technical. It is a functional division of the structure of the productive process: it reveals the possibilities of the process as a dynamic system . . . " *For a New Political Economy*, 236-237; *Macroeconomic Dynamics: an Essay in Circulation Analysis*, 26-27.

Notes for Chapter Seven *Incomes and Prices in Economic Growth*

The epigraph text is from Bernard Lonergan, *For a New Political Economy*, 298 and 289-290; *Macroeconomic Dynamics: An Essay in Circulation Analysis*, 153 and 139-140. Lonergan refers to his normative or equilibrium theory of innovative growth as a "pure cycle."

[67] Michael McCormack, *Origins of the European Economy*, 759-777.

[68] Jean Gimpel, *The Medieval Machine: The Industrial Revolution of the Middle Ages* (New York: Penguin 1983), the chapters on energy sources and agriculture, 1-58.

[69] See, for example, the chapter on production and cost in Lipsey, Sparks and Steiner, *Economics* (New York:Harper & Row 1979) or similar textbooks.

[70] Lonergan used a similar distinction between his short-term acceleration and long-term acceleration in a developing economy. *For a New Political Economy*, 80-81, 281; *Macroeconomic Dynamics*, 32, 128-129.

[71] *Forced saving* is defined in chapter five, note 51.

[72] As Bernard Lonergan put it, "If prices are consistent, the price of money is consistent. It follows that there is one price of money for the whole economy, and that inflation and deflation are

variations in this one price and so affect all monetary prices in like manner." *For a New Political Economy,* 177.

[73] Ibid. 92. "Tell men to seek a profit and tell them that profit is the result of intelligence, enterprise, and risk. Things will go well for a while. But sooner or later even the stupidest will realize that the maximum return for their money is through monopoly prices and inelastic demand. This maximum return coincides with the minimum welfare of the community."

[74] Schumpeter, Keynes, and Lonergan call for more consumption as well as more investment to maintain economic production. Keynes did not support controlling an economic boom by raising the interest rate as it might "deter some useful investments and might further diminish the propensity to consume." He saw that the remedy would rather lie in "taking drastic steps, by redistributing incomes or otherwise, to stimulate the propensity to consume." While Keynes's social philosophy included the redistribution of income through taxation, he also saw that such redistribution was limited. "Significant inequalities in income and wealth" remain important, as "there are valuable human activities which require the motive of money-making and an environment of private wealth-ownership for their full fruition." *General Theory of Employment, Interest, and Money,* 321, 374.

[75] Schumpeter's view of profits in growth and investment are stated as follows in *The Theory of Economic Development,* 128-129. "Entrepreneurial profit is a surplus over costs. From the standpoint of the entrepreneur, it is the difference between receipts and outlay in a business . . . in the circular flow the total receipts of a business—abstracting from monopoly—are just big enough to cover outlays. In it there are only producers who neither make profits nor suffer losses and whose income is sufficiently characterized by the phrase 'wages of management.' And since the new combinations which are carried out if there is 'development' are necessarily more advantageous than the old, total receipts must in this case be greater than total costs." Ibid. 251, Schumpeter also noted that "the expenditure of entrepreneurial profit not annihilated by the fall in prices necessarily more than prevents any lasting shrinkage in the real demand for labour. . .When, and to the extent that it is invested, an increase in the real demand for labour takes place."

[76] Frank Hahn, *The Share of Wages in the National Income* (London: Wiedenfeld and Nicolson 1972) 147-149. " . . . A higher proportion of income invested must necessarily mean, because of lags in production etc., a lower proportion of income consumed. Our assumption of flexible prices then ensures a change in the distribution of income in terms of these consumption goods . . . Any innovation has two effects: 1) it will affect the equilibrium ratio of the marginal products of factors to the ratio in which they

are combined in production; and 2) it will affect what we might loosely call the propensity to invest and therefore the share of wages when the system is not in long run equilibrium." Hahn concludes "As far, however, as problems of economic development are concerned, the odds are greatly in favour of the classical theory." With innovation the ratio of capital to consumer goods in production or the ratio of fixed to circulating capital is important.

[77] Robert J. Gordon and Ian Drew-Becker, "Where Did the Productivity Growth Go? Inflation Dynamics and the Distribution of Income," NBER Working Paper 11842, National Bureau of Economic Research, Cambridge, MA02138.

[78] Friedrich Hayek, "Social or Distributive Justice" in *The Essence of Hayek*, 70-71. Hayek acknowledges that "the market process is like a game as defined in the Oxford Dictionary; 'a contest played according to rules and decided by superior skill, strength or good fortune.' "

Notes for Chapter Eight *Capabilities for Production*

The epigraph texts are from Bernard Lonergan, *Method in Theology* (New York: The Seabury Press, 1972) 48-49; and Amartya Sen, *Commodities and Capabilities* (New Delhi: Oxford University Press 1999) 7, 45.

[79] Bernard Lonergan, *Insight: A Study of Human Understanding* (Toronto: University of Toronto Press 1992 [1957]) 645-646.

[80] Edward Prescott, "The Transformation of Macroeconomic Policy and Research," Nobel Prize Lecture 2004. www.Nobelprize.org. Accessed August 22, 2007, 385-388.

[81] Olivier Blanchard and Danny Quah, "The Dynamic Effects of Aggregate Demand and Supply Disturbances," paper presented at a meeting on business cycles, McGill University, March 1988; Edmond Malinvaud, *The Theory of Unemployment Reconsidered* (London: Basil Blackwell 1977)

Notes for Chapter Nine *Governments in the Economy*

The epigraph text is from Bernard Lonergan, *For a New Political Economy*, 96-97. Words in brackets have been added.

[82] Bernard Lonergan, *For a New Political Economy*, 5.

[83] Karl Polanyi, *The Great Transformation* (Boston: Beacon Press 1957) 135-150.

[84] See note 6 in chapter one and note 13 in chapter two.

[85] Information on unemployment insurance history is from www.ssh.dukejournals.org. Accessed August 2, 2007.

[86] Bernard Lonergan, *Macroeconomic Dynamics*, 119-120.

[87] Lonergan connects the activities of government, banking, and foreign trade that are able to add or remove financial resources

from the private economy in ways that can help or hinder economic growth. See, for example, *Macroeconomic Dynamics,* 63-65; *For a New Political Economy,* 265-266.

[88] *Progressive taxes* mean that the higher a person's income, the higher the proportion, or percentage, paid to the government in taxes. The rationale is that the higher your income is, the larger the percentage of it you can give to support government services and benefits.

[89] John Richards, *Retooling the Welfare State: What's Right, What's Wrong, What's to Be Done* (Toronto: C.D. Howe Institute 1997) Policy Study 31; "Reducing Poverty: What has Worked, and What Should Come Next," C.D.Howe Institute *Commentary,* no. 255, October 2007.

[90] Keynes's view was expressed as follows: J.M. Keynes. *General Theory of Employment, Interest, and Money* (London: MacMillan 1961 [1936]) 325: "I am myself impressed by the great social advantages of increasing the stock of capital until it ceases to be scarce . . . moreover, I should readily concede that the wisest course is to advance on both fronts at once. Whilst aiming at a socially controlled rate of investment with a view to a progressive decline in the marginal efficiency of capital, I should support at the same time all sorts of policies for increasing the propensity to consume. For it is unlikely that full employment can be maintained, whatever we may do about investment, with the existing propensity to consume."

Notes for Chapter Ten *Foreign Products and Money*

The epigraph text is from Bernard Lonergan, *Macroeconomic Dynamics: an Essay in Circulation Analysis,* 165-170; and *For a New Political Economy,* 310-314. Bracketed words have been added.

[91] International Bank for Reconstruction and Development (IBRD), International Financial Corporation (IFC), International Development Association (IDA).

[92] Lonergan discusses international trade as circuits of goods, services, and finance superimposed on the consumption and investment circuits of production and exchange in the national economy. Because international trade and finance are superimposed, there are additional criteria for achieving balance in Lonergan's crossovers from, and to, supply and demand for capital or producer goods and services, and from, and to, supply and demand for consumer goods and services. Lonergan sees that export surpluses, when reinvested, can add to the "thrift and enterprise" needed for the expansionary phase of economic growth and development. But he sees that import surpluses tend to compete with domestically produced goods and services. In a young country, import surpluses may be offset by foreign investment and a growing economy. But import surpluses can also

create international debts. Excessive imports cannot be sustained indefinitely by debt, which, in general, must be repaid. See, for example, *For a New Political Economy,* 308-316; *Macroeconomic Dynamics,* 162-173.

[93] Bruce Anderson, "Foreign Trade in the Light of Circulation Analysis," *Journal of Macrodynamic Analysis,* JMDA 1:1 (Summer 2001) 9-31. www.mun.ca/jmda/ Accessed June 2004. Anderson uses Lonergan's distinction between capital and consumer goods and their relations during economic growth to argue that trade liberalization does not necessarily make everyone better off. For Anderson, investment needs differ between countries as do the links between foreign investments and export outcomes.

[94] Goldman and Kouba, *Economic Growth in Czechoslovakia,* 21-32.

[95] W.M. Scammell, *The International Economy Since 1945* (New York: St. Martin's Press 1980) 165-178; P. Low, R. Piermartini, and J. Richtering, "Multilateral Solutions to the Erosion of Non-reciprocal Preferences in NAMA" (WTO Working Paper ERSD–2005-05) 28-29

[96] Although the first-best or ideal solution would favour free trade, economists like Richard Lipsey have shown that removing one distortion when others continue to exist may or may not improve people's welfare. See, for example, "The Theory of Customs Unions: A General Survey," *The Economic Journal,* September 1960.

[97] William Easterly, *The White Man's Burden*, 365-384; Raghuram G. Rajan and Arvind Subramanian in their article, "What Undermines Aid's Impact on Growth?" (IMF Working Paper 05/126, June 2005), find that aid inflows have systematic adverse effects on the competitiveness of a country's exports by raising the value of its currency's exchange rate. Aid, they find, also creates demand for factors of production, like skilled labour, that are already in short supply in a poor country.

[98] Just as government budgets must aim to balance spending with taxes over time if not every year, international payments must also tend toward balance in the medium term.

[99] IMF World Economic Outlook, October 2005: Global Imbalances: A Saving and Investment Perspective, 91-123.

[100] Paul Hoyt-O'Connor, "Macroeconomic Dynamics and the Work of Nations: Lonergan and (Robert) Reich on the Global Economy," *Method: Journal of Lonergan Studies,* Volume 17, number 2, Fall 1999, 111-131. Hoyt-O'Connor draws attention to the lack of a framework for international financial transactions that leads to huge "volumes of capital flows across borders" that can, "rapidly changing direction, often bringing central banks to their knees." The author criticizes the excessive quest for ever-higher returns by global corporations when such search is not related to innovative investment.

[101] *The Economist* (July 15, 2007), 12.

[102] Scammell, *The International Economy Since 1945,* 162; IFC and World Bank report "Doing Business in 2006: Creating Jobs." www.ifc.org Accessed May 15, 2007.

[103] Adolphe A. Berle and Gardiner Means, *The Modern Corporation and Private Property*, chapters 2 and 10.

Notes for Chapter Eleven *Individuals in Society*

The epigraph texts are from Bernard Lonergan, *Insight: A Study of Human Understanding,* 619-620; 262-263.

[104] Jochen Runde, "Bringing Social Structure Back into Economics: On Critical Realism and Hayek's *Scientism* Essay," *Review of Austrian Economics* 14(1) 2001, 5-24.

[105] Friedrich Hayek, "'Social' or Distributive Justice," Chapter 5, *The Essence of Hayek*, edited by C. Nishiyama and K.R. Leube (Stanford: Hoover Institution Press 1984) 70.

[106] Friedrich Hayek, *Individualism and Economic Order* (New York: Routledge & Kegan Paul 1949) 13-32.

[107] Ronald Beiner, *What's the Matter With Liberalism?* (Berkeley: University of California Press 1992) 171-192; *Liberalism, Nationalism, Citizenship: Essays on the Problem of Political Community* (Vancouver: UBC Press 2003) 75-78.

[108] Friedrich Hayek, *Studies in Philosophy, Politics and Economics* cited in note 13 of chapter two, "The Principles of a Liberal Social Order" in *The Essence of Hayek*, 363-381.

[109] Friedrich Hayek, *Studies in Philosophy, Politics and Economics,* 83-105. The following section relies on Hayek's analysis.

[110] Friedrich Hayek, "Scientism and the Study of Society" *Economica,* part one August 1942, 267-291; part two February 1943; part three February 1944, 27-39.

[111] Bernard Lonergan, *Macroeconomic Dynamics*, 105; *Method in Theology* (New York: Seabury Press 1979) 248-249.

[112] Milton Friedman, "Inflation and Unemployment," Nobel Lecture 1976, 268. "In order to recommend a course of action to achieve an objective, we must first know whether that course of action will in fact promote the objective. Positive scientific knowledge that enables us to predict the consequences of a possible course of action is clearly a prerequisite for the normative judgment whether that course of action is desirable."

[113] Frank McLaughlin, "Economics as a Vocation," working paper prepared for the Lonergan Workshop, Boston College, October 27, 2005.

[114] Bernard Lonergan, *Insight,* 558-9.

[115] Discussion of psychic biases is in Robert M. Doran, *Theology and the Dialectics of History* (Toronto: University of Toronto Press 1990) 8-9, 42-63.

[116] Bernard Lonergan, *Insight,* 238.

[117] Bernard Lonergan, *Method in Theology*, 49, 54.

[118] Ibid. 52.

[119] Bernard Lonergan, *For a New Political Economy,* 52.

[120] Michael Walzer, "Governing the Globe" *Dissent* Fall 2000, 44-52; *Politics and Passion: Toward a More Egalitarian Liberalism* (New Haven: Yale University Press 2004) 131-140.

[121] Kenneth Melchin has written widely on ethics and business. See, for example, "What is 'the Good' of Business? Insights from the Work of Bernard Lonergan," *Anglican Theological Review* 87: 1 (2005) 43-61; and "Economies, Ethics, and the Structure of Social Living," *Humanomics* vol.10, no. 3, (1994) 21-57.

[122] Friedrich Hayek, "The Principles of a Liberal Social Order," chapter 5, *The Essence of Hayek, 378*. In his discussion of the advantages of "the spontaneous order of the market," Hayek contends that "There is of course no reason why a society which, thanks to the market, is as rich as modern society should not provide *outside the market* a minimum security for all who in the market fall below a certain standard."

[123] Lonergan also speaks of religious values that people have developed from their experiences and their sense of what is beyond their knowledge, all of which has been expressed in the great world religions. "A religion that promotes self-transcendence to the point, not merely of justice, but of self-sacrificing love, will have a redemptive role in human society inasmuch as such love can undo the mischief of decline, and restore the cumulative process of progress,"*Method in Theology*, 55.

[124] Bernard Lonergan, *For a New Political Economy,* 4.

Notes for Appendix One

[125] Lonergan notes that the indeterminacy can be limited "either by adding further information about the nature of the game or by adding further suppositions (or assumptions)." *For a New Political Economy,* 211. The words in brackets have been added.

[126] This example does not include money flows from banks, governments, and international finance directly to incomes and demand. Such flows do, of course, exist. But net new money flows that do not go to new production Lonergan views as related to bubbles and depressions, or to deficits or surpluses in government budgets and international payments. See Bernard Lonergan, *For a New Political Economy*, 265-266; *Macroeconomic Dynamics*, 131.

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